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Coordinating Exports by Farmer Cooperatives



Abstract

COORDINATING EXPORTS BY FARMER COOPERATIVES, by Mark D. Newman and Harold M. Riley. Cooperative Marketing and Purchasing Division, Agricultural Cooperative Service, U.S. Department of Agriculture.

This research evaluates opportunities for farmer cooperatives to expand international trade through multicooperative and multicommodity arrangements. Nine component functions of the export process are discussed, including procurement, processing, physical distribution, market information, sales, finance, documentation, risk management, and regulation. Coordination in finance and regulation functions can be achieved across a broad commodity range. For other functions, coordination may be maximized within two commodity groups: bulk undifferentiated commodities and perishable, or differentiated, products. Six organization alternatives were evaluated, the most promising being export management cooperatives, federated export cooperatives, joint ventures, and Webb-Pomerene associations. Less promising arrangements are trade information services and cooperative brokerage organizations.

Keywords: Cooperatives, exports, marketing, organization, coordination.

Preface

The purpose of this study was to identify and evaluate opportunities and methods for U.S. farmer cooperatives to improve their competitive position in international markets through multicooperative and multicommodity arrangements.

The investigation was organized around two specific objectives. The first was to describe functional stages of the exporting process and to evaluate potential advantages of multicooperative, multicommodity coordination within the various functions. The second was to describe and analyze organizational alternatives through which cooperatives might coordinate export marketing.

In the initial phase of the study, extensive use was made of secondary sources of information regarding exporting procedures and special characteristics of exporting agricultural products. In the second phase, personal and telephone interviews were conducted with 130 individuals, including managers and export marketing specialists in a group of cooperatives broadly representative of different commodity groups and different regions of the United States. Contacts also included noncooperative exporters, freight forwarders, export management firms, financial institutions, and research staff in the U.S. Department of Agriculture and selected universities.

The authors are indebted to many individuals who shared information and opinions essential to the study. Special thanks go to the following cooperative leaders who reviewed and commented on an early draft report—Robert Boothe, formerly of Producers Grain Corporation; Ronald Dudley, Land O'Lakes, Inc.; William Hiller, Agway, Inc.; John Huber, Sun-Diamond; Edward Powell, Michigan Elevator Exchange; and Donald Sands, Gold Kist, Inc. The authors also thank the professional staff in the Agricultural Cooperative Service (ACS) for their suggestions and support during the conduct of this study.

This research was conducted under a Cooperative Research Agreement jointly funded by Agricultural Cooperative Service (ACS), and the Michigan Agricultural Experiment Station. Additional support was provided by the Kansas Agricultural Experiment Station. It is a part of a research program undertaken by ACS to help cooperatives develop more effective export marketing programs.

Highlights

Expanding export markets for U.S. agricultural commodities are providing new opportunities for farmer cooperatives to extend their involvement in international markets. However, making foreign sales carries substantial risks. To be successful in the export business requires a sustained, long-term effort with a skilled professional staff and sufficient sales volume to achieve low per-unit marketing costs. For many farmer cooperatives, these conditions can only be achieved through joint efforts with other cooperatives or joint ventures with noncooperative firms.

This report identifies, describes, and evaluates six organizational options through which cooperatives may participate in multicommodity and multicoperative arrangements to improve their competitive positions in international trade. The report also surveys nine functional components of the export marketing process and assesses opportunities for achieving economic advantages through joint arrangements with other cooperatives.

Results of this study indicate cooperatives can achieve significant economic advantages by coordinating export marketing through cooperative export management arrangements, multicommodity federated export cooperatives, joint ventures, and Webb-Pomerene associations. Several case examples are presented to illustrate actual use of these organizational options.

In cooperative export management (CEM) arrangements, a lead cooperative maintains control over a joint export organization while providing export services to other cooperatives on a fee basis. Where participating cooperatives handle significantly different sales volumes, a CEM arrangement is one means of inducing a large and successful cooperative exporter to enter into a joint marketing endeavor with smaller cooperatives serving as supplemental product suppliers.

Multicommodity federated export cooperatives (MFEC) provide an opportunity for cooperatives to participate with co-equal status in decisionmaking on export marketing strategy and objectives. The MFEC may take the form of a joint export marketing agency handling a greater share of the production of a particular commodity or providing a broader line of products. Alternatively, an MFEC may emphasize a particular function such as export transportation, distribution, sales, or foreign exchange trading. In the short and medium term, the most advantageous export coordination opportunities through MFEC arrangements are likely to be based on similarities in geographic location of product supply and market outlets and in functional export requirements.

Joint ventures offer opportunities for cooperatives to coordinate export activities and develop cooperative-noncooperative partnerships in export marketing. Joint ventures may involve a combination of cooperative product origination capacity with noncooperative export marketing systems, joint performance of selected export functions, or joint development of export marketing systems. The complementarity of objectives in cooperative-noncooperative ventures must be given careful scrutiny to assure it is consistent with the overall marketing objectives of the cooperative and its members.

Webb-Pomerene associations are another mechanism for collaboration in exporting that may include cooperative and noncooperative participants. Under certain conditions, the Webb-Pomerene Act provides explicit antitrust protection for collaboration among domestic competitors in export marketing. As such, it may complement any of the above organizational forms and may extend the limited antitrust exemptions granted cooperatives under the Capper-Volstead Act. Webb-Pomerene associations have been used to: (1) establish joint export sales agencies, (2) permit smaller exporters to put together the product volume necessary to bid on large sales, (3) improve bargaining advantages of shippers in obtaining lower ocean freight rates, and (4) influence foreign country import regulations. It is also a mechanism

through which groups of U.S. exporters can improve their competitive positions in dealing with state traders and avoiding cut-throat competition among themselves.

Two organizational options that offer limited potential for cooperative exporters are the cooperative trade information service (CTIS) and the cooperative brokerage organization (CBO). Both CTIS and CBO arrangements require minimal commitment by participants, a major factor limiting their effectiveness.

Nine interrelated functions that must be performed in exporting agricultural products are: (1) procurement, (2) processing, (3) transportation and physical distribution, (4) market information, (5) sales, (6) financing, (7) documentation, (8) risk management, and (9) regulation. Within each of these export marketing functions are opportunities to increase effectiveness of cooperative exporting through collaboration.

One promising area for multicooperative coordination is in international transportation. Significant cost reductions can be obtained through collaborating in ocean vessel chartering; arranging regular, large-volume general cargo shipments; and consolidating insurance coverage. Multicooperative efforts also have been effective in organizing transportation of products to and through port facilities and negotiating favorable domestic freight rates on volume movements of products destined for export markets.

Significant cost reductions and service improvements are possible through coordinated, multicooperative arrangements for carrying out closely interrelated functions of sales, information, finance, and documentation. The form and substance of how to organize these arrangements, however, is not easy to generalize across a wide range of commodities. Large trading volumes and an extensive sales network are essential if cooperatives are to compete with large international trading companies that dominate international grain markets. On the other hand, smaller scale joint cooperative exporting programs can be cost-effective in exporting fruits, vegetables, nuts, and processed foods.

It is hoped that management and boards of directors of U.S. farmer cooperatives will use this report to develop a perspective on their opportunities and the objectives that can be pursued in strengthening exporting operations. This study did not attempt to evaluate the potential for specific groups of cooperatives to coordinate their exporting activities. Hence, more specific feasibility studies are needed. These studies should focus on more narrowly defined organizational arrangements, specific exporting functions, and particular foreign markets.

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Coordinating Exports by Farmer Cooperatives

Mark D. Newman
Assistant Professor
Department of Agricultural Economics
Kansas State University

Harold M. Riley
Professor
Department of Agricultural Economics
Michigan State University

OVERVIEW

Agricultural exports are critical to the health of the U.S. economy. Their value has grown more than sixfold in the past decade to \$43 billion in calendar year 1981. On average, production from one out of every three acres harvested is exported. For some commodities, this proportion is much higher. In addition to improving returns to farmers and agribusinesses, exports lessen balance-of-payments deficits and help pay for the wide variety of imported goods that Americans use. Foreign demand for U.S. agricultural commodities also contributes to the strength of the U.S. dollar in international markets.

Farmer cooperatives have a long history of interest in marketing their members' products abroad. Origins of export marketing by farmer cooperatives can be traced to the early part of this century. Although farmers, in general, have benefited from expanded export sales, there is considerable interest in increasing returns to growers through greater participation in exporting. A high proportion of commodities assembled by producer-owned cooperatives are moved through export channels by large, investor-owned, international trading companies. These international companies maintain an extensive network of foreign sales offices, handle a wide range of commodities, and fill sales commitments through purchases from whatever source is most advantageous. Concerted efforts are being made to further extend cooperative penetration into exporting, and by so doing, to increase net returns to members. Innovative initiatives and successfully coordinated cooperative exporting activities have been undertaken in a number of commodity areas, including grains, cotton, rice, fruits, and nuts.

As cooperatives attempt to increase their export involvement, however, several barriers to entry must be considered:

- The volume of exports by most single commodity cooperatives is neither large nor regular enough to permit effective competition with large, multinational trading firms and state trading agencies.

- The financial strength of many individual cooperatives may be inadequate to assume the risks of international trade. With low volume, spreading those risks is difficult.
- The range of products offered by most individual cooperatives is limited. Many foreign buyers may prefer single-source suppliers.
- Single-product cooperatives may have limited ability to cover the large, fixed costs of becoming established in foreign markets, hiring necessary marketing expertise, developing marketing intelligence, and maintaining foreign sales representation.

These considerations suggest that, if cooperatives can combine their efforts, barriers to entry into exporting may be reduced for individual cooperatives.

Coordination is the foundation of farmer cooperatives. The Capper-Volstead Act provides agricultural producers limited antitrust protection when they coordinate member marketing through cooperatives. This permits independent producers to share in economies of marketing that can be achieved through large sales volumes. Several regional and interregional cooperatives in the United States exist for that reason. As cooperatives explore options in export marketing, coordination may also prove advantageous. Four types of coordination may be considered:

- *Horizontal* coordination emphasizes control of a larger portion of the total supply of a given commodity;
- *Vertical* coordination harmonizes successive functions in the marketing process;
- *Product extension* combines several related commodities; and
- *Conglomerate* coordination combines factors flowing from size, name recognition, internal availability of capital, or other factors generally unrelated to the commodities being handled.

The Export Marketing Process

In this study, the export process was divided into nine functions that generally parallel domestic marketing functions, but often involve different participants, greater risks, and more complex organization arrangements. These functions are: (1) procurement, (2) processing, (3) transportation and physical distribution, (4) market information, (5) sales, (6) financing, (7) documentation, (8) risk management, and (9) regulation.

Similarities in export marketing procedures for different commodities can allow cooperatives to lower costs by coordinating their activities. The range of commodities for which similarities exist varies by function. Where economies in performance of an individual function increase with sales volume over an extended range, development of single-function collaborative arrangements may bring some advantages. However, economies in performance of a single function must be judged against trade-offs in satisfying overall export marketing requirements of individual cooperatives. Because export marketing involves interdependent functions, economies obtainable through coordinated arrangements for one function may prove unattainable if other functions cannot be performed effectively and efficiently.

In assessing coordination potential, commodities initially can be subdivided into two major categories: (1) bulk undifferentiated commodities and (2) differentiated products including perishable, processed, or branded products. Additionally, handling requirements and size of sales differ between dry bulk commodities and bulk liquids. Also, the unique channels followed by fresh fruits and vegetables suggest they should be distinguished from canned, dried, and frozen fruits and vegetables. The distinction between handlers of fresh fruits and those of processed fruits and products is so great that some cooperatives have completely separate marketing divisions for fresh and processed forms of the same commodities. While this distinction is important, interdependence of fresh and processing markets for many commodities prevents their complete separation.

Cooperative Exporting Strategy

Domestic and export marketing activities are interdependent. If a cooperative is unable to serve its current domestic customers, its problems will only be compounded by entry into export markets. On the other hand, an effective domestic marketing program may be complemented by adding foreign customers.

A long-term outlook is important when cooperatives evaluate their export potential and options. The expectation that members will need and be able to supply foreign customers in the future can justify development of export markets. If it

is unlikely that foreign customers can be supplied over a long period, developing the cooperative's own foreign marketing system probably will not be economically justifiable. Through evaluation of its overall marketing strategy, a cooperative can establish a range of export marketing objectives and prospects, which, in turn, will affect the coordination arrangements that will be most beneficial.

Market Development vs. Sporadic Sales. The ability of an individual cooperative to contribute to a coordinated exporting arrangement will be influenced strongly by its objectives in exporting. Approaches to exporting vary from continuous and aggressive export market development to passive and sporadic exporting (fig. 1).

For an aggressive marketing cooperative that is willing and able to serve both foreign and domestic customers on the same basis, there may be substantial incentives to becoming an efficient and effective exporter. A cooperative whose only interest in exporting is to dispose of periodic domestic surpluses will have different incentives in developing exporting capabilities. A cooperative interested in occasional sales or surplus disposal may commit resources to export marketing on a regular basis to have access to foreign markets when needed. A cooperative's ability to contribute a reliable supply for export will influence both its export options and ability to contribute to collaborative arrangements.

Some cooperatives that take a generally passive approach toward exporting will be willing to make a limited investment in a joint exporting arrangement on the basis of its public and member-relations potential. Cooperatives with each type of objective will differ significantly in their contribution to achieving functional economies through regular, large-volume exporting.

ORGANIZATIONAL ARRANGEMENTS FOR COOPERATIVE EXPORT COORDINATION: OPTIONS AND CASES

Six organizational arrangements that might serve the needs of U.S. farmer cooperative exporters were evaluated. These options are:

- *Cooperative trade information service (CTIS)*—providing market information as well as trade leads to cooperatives from foreign buyers;
- *Cooperative brokerage organization (CBO)*—arranging transactions without taking title to commodities;
- *Cooperative export manager (CEM)*—one cooperative taking the lead and serving as the export department for other cooperatives;

Figure 1

Commitment and strategy of exporters.

AGGRESSIVE EXPORT MARKET DEVELOPER

Export Market Developer

Export marketing as an integral component of overall marketing strategy. Long-term commitment to develop foreign customers and serve them on the same basis as domestic customers.

Occasional Exporter

Has occasional export sales, but is willing to regularly commit resources to preserve export marketing options.

Surplus Exporter

Seeks export markets in years of excess domestic supplies.

Passive Exporter

Responds to export opportunities if sought out by foreign customers, and if there will be little interference with domestic marketing efforts.

PASSIVE EXPORT SUPPLIER

- *Multicommodity federated export cooperatives (MFEC)*—individual member cooperatives providing commodities to a federated association that takes title and marketing responsibility;

- *Joint venture arrangements*—forming multiple cooperative or cooperative-noncooperative partnerships for export marketing; and

- *Webb-Pomerene associations*—forming a variety of collaborative exporting arrangements permitted under the Webb-Pomerene Act.

In evaluating the potential usefulness of each option, a number of different factors must be considered. First, economic factors related to the functional elements of export marketing must provide opportunity for profitable export coordination. Additionally, management styles, objectives of participants, distribution of control in a proposed arrangement, participant size and sales volume, financial strength, and marketing environment of each commodity must be considered in establishing collaborative exporting arrangements.

Each organizational option implies a different balance of decisionmaking control among participants. Boards of directors, managers, and members of many cooperatives are hesitant to delegate control to larger organizations to which the cooperatives may belong. This applies to such relationships as those between local and regional cooperatives for domestic marketing, as well as potential arrangements for export coordination. Recognizing linkages between control and effective management may be helpful in designing institutional arrangements capable of both flexibility and responsiveness to the needs and constraints of cooperative managers, members, and customers.

Cooperative Trade Information Service (CTIS)

A CTIS would provide market information and trade leads and contacts to U.S. cooperative exporters, at the same time promoting cooperative products to foreign customers. The services of a CTIS could be enhanced by providing credit checks on potential customers, foreign regulatory information, and client assistance in collections or insurance claim settlements. The greatest beneficiaries of a CTIS would be new entrants to an export market with few foreign contacts and small volumes of product for export.

Trade leads and market information are available to cooperatives through agents, brokers, foreign customers, trade associations, trade publications, and domestic and foreign government agencies. To attract members, a CTIS would need to offer better service or lower the cost of information. Better service might include data from more mark-

ets, more detailed coverage of important markets, timely delivery of information to traders, accurate analysis of the impact of the information on export sales, or representation of cooperative exporters before industry groups and government agencies. Costs of a CTIS would decline as familiarity with specific geographic and commodity markets increases.

A fundamental shortcoming of a CTIS is that it is excluded from much available market information by not participating in actual sales. Exporters regularly participating in sales generate much of the same information a CTIS would. A broadly based CTIS might find it difficult to perform any better or to lower costs below existing information services.

The Trade Opportunity Referral Service (TORS) of USDA's Foreign Agricultural Service is a trade information service available to U.S. exporters. Through TORS, more than 6,000 U.S. suppliers of agricultural products receive trade leads obtained by U.S. agricultural attachés abroad. These are transmitted via computerized mailgrams and compiled in a weekly bulletin "Export Briefs." Additionally, U.S. firms are offered an opportunity to announce their products to foreign buyers through a monthly bulletin, "Contacts for U.S. Food Products."

Because TORS does not assess reliability of foreign importers, the quality of trade leads supplied is variable. TORS can supply lists of importers' commodity interests, business size, and bank references in about 50 major markets. It cannot indicate motivation behind an inquiry, whether the market is just being tested or a bona fide supply source is sought.

Many cooperative exporters indicated they regularly investigated TORS leads, either directly or through agents. Some acknowledged making sales as a result. Often, however, they found inquiries were from individuals hoping to act as intermediaries or firms that had already made purchases and wanted to compare prices. Several cooperative leaders expressed interest in a service that could verify credibility of TORS inquiries.

Alternatives to a CTIS include use of agents or representatives to obtain market information, purchasing access to an information network of other exporters, establishment of foreign sales offices combining market information with sales functions, or other organizational arrangements described below.

Cooperative Brokerage Organization (CBO)

A CBO would bring buyers and cooperative sellers together without taking title to commodities. The CBO option offers little potential advantage over existing noncooperative brokerage services that have flexibility to operate in many dif-

ferent markets. A cooperative brokerage service might actually operate at a competitive disadvantage if constrained to handling an irregular supply of commodities from cooperative members. Furthermore, a brokerage organization usually is not involved in long-term market development activities.

Cooperative Export Manager (CEM)

A CEM arrangement involves one cooperative taking the lead and acting as the export department for other cooperatives' products, providing marketing services for a fee. In some instances, the lead cooperative might provide patronage refunds to those using its services.

CEM Case 1—Sun-Diamond Growers of California. An example of one cooperative serving as an export manager for another is provided by Sun-Diamond Growers of California, which handled domestic and export marketing for another cooperative, Valley Fig Growers, on a contract basis for several years prior to their merger in 1981. The arrangement gave Valley members access to a sales network that included agents in 50 countries without the need to support the fixed costs of its own marketing organization. In exchange, Valley Fig Growers paid commissions to Sun-Diamond and gave up some control over marketing of its products.

The CEM relationship allowed Sun-Diamond to cover some of its fixed costs with the commissions from sales of Valley products and made Sun-Diamond a more important supplier because of a more complete line of dried fruits and nuts.

CEM Case 2—A.E. Chew International. Useful parallels can be drawn between a CEM arrangement and traditional export management firms (EMF). An EMF will serve as a company's export department, performing a full range of functions, including market information, sales, and financial arrangements. An EMF may handle exports to a single region or worldwide.

One export management firm, A.E. Chew International, handles agricultural products, ranging from beans and popcorn to hot pepper sauce. Chew serves as a seller's export department, preparing invoices in the seller's name and receiving and forwarding collections to the seller. In some cases, Chew pays for goods in 30 days and takes over collections on its own account.

The ideal role of the export management firm would have it serving as the export department for a few companies with complementary but noncompetitive products. In reality, export management firms often diversify and handle a broad range of products from various supply sources and even trade for their own accounts. From the perspective of an EMF, complete dependence on business from a limited

number of accounts involves a sizable risk burden. While new accounts often sign a 6-month to 1-year contract with an EMF, older accounts may cancel on 60 to 90 days' notice. Chew, for example, does 70 percent of its trading for its own account. This reduces risk associated with loss of an individual client, but also may decrease incentives to be responsive to needs of individual clients.

CEM Case 3—Calavo Growers of California. Unlike the EMF, which maintains a distinct identity as the export department for individual clients, the CEM may be viewed as a means of consolidating cooperatively produced products into a broad product line. This is illustrated by the domestic marketing program of Calavo Growers of California. Calavo members are avocado producers, but the cooperative also markets other commodities. Calavo markets avocados produced by its members, while acting as the exclusive U.S. marketing agent for Alcot Farms Cooperative, a producer of kiwi fruit. Thus, Calavo salesmen can offer buyers a line of 10 to 12 commodities. Economies in transportation and sales are achieved, while commissions on kiwi fruit help defray marketing costs of avocados. Alcot Farms specifies a minimum volume to be marketed by Calavo. If production exceeds the minimum, Calavo agrees to try to market it but is not required to do so.

The CEM Evaluated. These examples indicate cooperatives can participate in a CEM arrangement as leaders or users. For leaders, a CEM presents opportunity to make better use of an existing export marketing system and to further develop it. For CEM users, the potential advantage is rapid access to a functioning export marketing system. The user has less control over export marketing, but costs and risks associated with use of a CEM may be less than those involved in putting together an effective single-product export program, especially for a smaller cooperative.

The desirability of participation in a CEM arrangement may depend on the potential commission costs. Commissions on processed food products exported by an EMF are generally about 10 percent of the free on board (f.o.b.) price. Where single sales are large, in the \$1 million range, for example, or markets are extremely competitive, EMF commissions may be reduced to about 3 percent. This fee includes commissions the EMF pays to foreign agents. Under the assumption that a CEM would charge a 10-percent commission, a potential exporter can project expected export sales to estimate costs of using a CEM. This can be compared to costs of developing an internal export department or participation in other export arrangements. On \$100,000 in annual export sales, 10 percent would provide only \$10,000 with which to develop an export program. In contrast, with \$10 million in annual export sales, \$100,000 in commissions could support a modest export program. In the latter case, investigation of alternatives to a CEM would be warranted.

In evaluating opportunities for coordination through a CEM, it is useful to recognize potential for: (1) economies in the performance of export functions, especially market information, sales, and transportation; (2) use of the CEM for export marketing to limited regional markets, even where other export arrangements exist; (3) benefits to the leader in a CEM from horizontal coordination where market opportunities exceed the leader's supply potential; and (4) advantages to all participants from marketing a broader product line.

Multicommodity Federated Export Cooperative (MFEC)

Specialized federated regional or interregional cooperatives have become increasingly important means to achieve size economies in specific manufacturing or marketing functions. The primary characteristic of a federated cooperative is that producers belong to associations that, in turn, belong to the federation. Management of a federated cooperative is guided by a board of directors selected by representatives of producers. This process has the advantage of being extremely open to producer input into decision processes. The primary disadvantage is that diffused power can result in limitations on short-term management flexibility. Members of a federated export cooperative would have greater control over exporting policies than they would as users of a CEM. The primary distinction between a CEM and an MFEC is that under the CEM, short-term control is vested in the lead cooperative, while the MFEC has more diffused control among members.

Export marketing involves risks and requires short-term decisionmaking flexibility. Differences in risks and the environment may justify development of federated marketing arrangements specifically devoted to export marketing. A federated arrangement permits smaller cooperatives to participate in a large enough collective market share to improve their competitive position in the market.

Vertical and horizontal coordination through a federated cooperative is a means to develop the volume necessary to retain specialists to handle specific export marketing functions. Specialization allows individuals to concentrate their energies on specific tasks where their comparative advantage is greatest, permitting achievement of better service and higher returns to producers.

Product extension by an MFEC may make cooperatives a more attractive supplier. Buyer costs can be decreased by obtaining a full line of related products from a single source. Product extension might involve providing a full line of food grains, oilseeds, feed ingredients, or processed fruits and vegetables. This type of coordination through a federated cooperative has the intuitive appeal of providing one-stop cooperative shopping for foreign customers.

Conglomerate coordination may involve sale of unrelated commodities and use of competitive tactics such as cross-subsidization and tie-in sales to develop markets for additional products. However, cross-subsidization of sales of some commodities with proceeds from sales of others could cause some problems for cooperatives due to the diffused nature of internal power structures and diverse interests among cooperatives. The fundamental issue is whether such an orientation can be compatible with overall marketing objectives of member cooperatives.

Federations may be formed to carry out a complete range of exporting functions or may be developed only for performing individual functions or groups of functions, such as representation, promotion, information, and transportation and distribution. Regional MFEC's may develop as a result of specific factors, such as use of a common port or participation in regional promotion efforts. They may also develop based upon commodity-related factors, such as seasonal marketing cycles, product-line attributes, and physical production factors, such as the existence of joint products.

Federated export cooperatives may be developed also on the basis of demand-related factors. This may arise from similarity in geographical markets or buyer organization. A federation established to deal with state traders probably would differ in commodity focus, organization, and activities from another with sales targeted for retail customers. Federated export cooperatives have more than 20 years of experience in exporting grains and oilseeds. Fruit and vegetable exporting has had some limited attempts at MFEC creation, but none with the size and breadth of membership found in the following examples for grains and oilseeds.

MFEC Case 1—Producers Export Company (PEC).¹

PEC was established in 1958 by 19 regional cooperatives handling wheat, rice, corn, other feedgrains, and oilseeds. PEC set up a New York office and attempted to establish itself as a national cooperative marketing agency while minimizing its risk exposure. The organization's risk-aversion strategy was best accomplished through back-to-back sales in which PEC became a principal, but only between delivery to the elevator and the end of the loading spout. Transactions most compatible with this strategy were sales to state traders who would purchase shipload quantities on an f.o.b. basis and Public Law (P.L.) 480 sales, where the U.S. government paid for grain on an f.o.b. basis.

Due to the operating methods of PEC and the importance of government programs in grain exporting in the 1960's,

wheat accounted for a major share of PEC sales volume. Three cooperatives accounted for most of the PEC volume, ranging from 80 percent in the first few years to 99 percent in 1967 and 1968.

Restricted access to port elevators limited PEC's ability to export grains. PEC had several short-term leasing arrangements for use of elevator facilities but no long-term leases or owned facilities. PEC members made two attempts at joint participation in port elevator construction projects.

In 1961, Union Equity tried to organize an interregional cooperative to jointly build an elevator at the Port of Houston, but other regionals were unwilling to commit themselves to such a sizable investment in light of their expected export volume to the Texas Gulf. Union Equity eventually built the facility alone.

In 1964, PEC formed a committee to study the feasibility of building an elevator on the Louisiana Gulf. In 1966, five PEC members and two nonmembers formed a new interregional, Farmers Export Company (FEC), for the construction of an export facility at Ama, La., near New Orleans. PEC and FEC discussed merger for about a year but were unable to agree on centralized control of port elevators. In early 1969, PEC was dissolved.

Several implications for cooperative export coordination can be drawn from the PEC experience. First, it is important to avoid significant differences in level of attention to interests of different members or groups of members. PEC was intended to be a national cooperative export marketing agency. While it never achieved the goal, it probably would have been considered a success if it had retired shares of inactive members and continued to serve the three cooperatives that were the principal patrons. The PEC experience indicates it may be necessary to establish different classes of MFEC membership. This could permit conditional membership subject to attainment of certain medium- or long-term objectives by the federated organization.

Second, in coordinating major capital investments, regionals are reluctant to make commitments to projects for which their members' potential use is uncertain. In both cases mentioned, an attempt was made to create a new interregional entity to participate in construction of port elevators. Other alternatives that might be considered are a lead cooperative making an investment in facilities while establishing long-term contracts for use by other cooperatives, or one cooperative owning and leasing facilities on a long-term basis to other MFEC members on a purchase-leaseback arrangement.

A third implication pertains to linkage between product commitment and market information. PEC issued marketing

¹This example draws heavily on Bruce J. Reynolds, *Producers Export Company: The Beginnings of Cooperative Grain Exporting*. Farmer Cooperative Research Report 15 (Washington, D.C.: USDA, 1980).

reports to its member regionals, identifying its export customers, intermediaries used in performance of export functions, and margins obtained. This information was a useful public relations tool for PEC and for regional managers in dealings with member locals. However, in some cases, marketing reports "may have even assisted some member regionals in competing against PEC for export outlets."²

PEC was not able to become the exclusive export marketing outlet for its members. Product commitment by PEC members might have strengthened the operation. However, an arrangement based on a first-refusal option still would leave the possibility that members could compete with their joint exporting organization, causing the MFEC to bid away margins required to maintain quality of service to members.

MFEC Case 2—Farmers Export Company (FEC).³ FEC was formed in 1966 as a result of mutual interest among seven regional cooperatives in port elevator facilities on the Louisiana Gulf. By 1980, it had grown to include 12 regional and interregional cooperatives and could originate a full line of grains and soybeans and make arrangements for elevation on all U.S. seacoasts.

FEC developed expertise in the performance of most functions associated with the export process. Grain for export was procured from both members and other sources. Members had a first-refusal option on FEC purchases. In 1978, 70 percent of the grain handled by FEC was from its members. No statistics were available on the percentage of member export sales made through FEC.

Substantial losses in commodity trading in late 1980 and early 1981 resulted in reorganization and scaling down operations. The export elevator at Galveston was disposed of and the number of members reduced. The export elevators at Ama, La., and Philadelphia, Pa., continue operations.

FEC is a functioning example of an MFEC. Its growth was, in part, a result of commitment by regional cooperatives to decrease their dependence on multinational grain traders to market their members' products. Until 1981, FEC pursued a strategy of being an effective competitor in the high-volume, standardized, bulk-grain trade. This thrust continues, although with more limited commodity mix and facilities locations.

²Ibid., p. 9.

³The material in this section is based on interviews conducted before FEC's reorganization in early 1981. Before then, FEC had grown to fourth or fifth place among U.S. grain and oilseed exporters, exporting about 14 million metric tons in 1979.

Future MFEC Potential. As the examples indicate, an operational MFEC exists for cooperatives handling grains and oilseeds. It does not include all cooperatives that handle that group of commodities and does not handle all member export sales. Nevertheless, FEC has attempted to build its capacity to provide producers with a cooperative alternative for exporting grains and soybeans.

Cooperatives handling other commodities have considerable opportunity for coordination through MFEC arrangements. There is already collaboration in promotion along commodity lines through the FAS cooperator program and a number of export-related joint ventures involving cooperatives handling processed fruits, nuts, and vegetables. These will be discussed in the following section dealing with joint ventures. Several arrangements began as federated export cooperatives and evolved into small joint ventures. While explanations for such changes were not readily available, one reason was that cooperatives with sharply different sales volumes have different marketing priorities, which make collaboration through a federated sales organization difficult.

In developing a federated arrangement, control issues may influence the most advantageous size of organization. One cooperative leader suggested limiting the number of cooperatives in any federated or joint arrangement is important for making decisions and moving rapidly. Limiting membership to six members would preserve that flexibility, although larger arrangements exist.

Thus, the MFEC is an organizational form that could be used for development of cooperative exports. Federated arrangements could be based on performing one or more export functions or on supply-related or demand-related factors.

Joint Ventures (JV)

A joint venture is defined by Hulse and Philips as, "...an association of two or more participants (persons, partnerships, corporations, or cooperatives) to carry on a specific economic operation, enterprise, or venture, but with the identities of participants remaining apart from their co-ownership or coparticipation in the venture."⁴ Joint venture participants usually agree upon arrangements for sharing expenses, profits, losses, risks, and control. While many federated cooperatives could be considered joint ventures, the discussion here will focus on smaller multicooperative or cooperative-noncooperative partnerships and their potential as a mechanism for export marketing coordination.

⁴Fred E. Hulse and Michael J. Phillips, *Joint Venture Involving Cooperatives in Food Marketing*, FCS Marketing Research Report 1040 (Washington, D.C.: USDA, 1975) p. 2.

Developing joint ventures with corporations is important to cooperatives in domestic markets, particularly in food processing. Arrangements involving vertical coordination often permit one partner, usually the corporate partner, to take advantage of decreased procurement uncertainties while giving the other a share of returns based on value added through processing.⁵

Joint ventures offer significant prospects for vertical coordination and product extension. To the extent they can assist domestic competitors to become more effective overseas marketers, they also have some horizontal coordination potential.

Vertical coordination through joint ventures may permit cooperatives to obtain access to a functioning international marketing system on a more rapid and profitable basis than through development of such a system individually.

Product extension may present the opportunity for partners in a joint venture to become a more important collective source of supply than as individuals. Additionally, economies of scale in performance of many export functions may be achieved through product extension.

Horizontal coordination among domestic competitors in export marketing may offer access to export marketing economies and permit development of market power to counter the existing strength of multinational companies and state trading agencies.

Thus, joint ventures offer almost the same potential for coordination as multicommodity federated export cooperatives. In fact, MFECs might be considered a type of joint venture. As noted above, MFECs and joint ventures have been separated in this analysis, so discussion of joint ventures can focus on arrangements involving cooperatives and noncooperative agribusiness firms.

Export-related joint ventures may be established advantageously on the basis of marketing functions or on demand or supply considerations. Functionally, the range of coordination opportunities for a joint venture is the same as for an MFEC. Demand-based ventures may take advantage of similarity in organization of foreign demand, complementarity of demand for commodities handled, or need to avoid being played off against other suppliers by foreign buyers. Supply-based coordination also presents some opportunities for coordination of procurement and other functions. In evaluating joint venture prospects, a discussion of the experience of two cooperative joint ventures may be helpful.

JV Case 1—California Valley Exports (CVE). CVE is a joint venture export sales company established in 1970 by Tri/Valley Growers and California Canners and Growers, two major West Coast cooperatives. CVE handles export sales of processed fruits and vegetables to retail, institutional, and industrial buyers throughout the world.

CVE was developed to counter buyers' ability to play each cooperative against the other in European markets. Before formation of CVE, each cooperative maintained its own agents and representation in Europe. Facing destructive competition against each other in those markets, but wishing to remain competitors domestically, a joint venture offered opportunity to collaborate abroad.

As their markets developed throughout the world, Tri/Valley and Cal-Can also found themselves positioned against one another in other markets. In 1976, CVE was expanded from its regional focus and given responsibility for marketing throughout the world.

Each year, CVE management prepares and submits a marketing plan to its parent cooperatives. Each cooperative assesses its capability to supply the volume necessary to fulfill that plan. It decides to make a commitment to supply a certain percent of the plan, but may re-evaluate that commitment during the packing season. Where owners are unable to fill its marketing needs, CVE goes to other cooperatives and noncooperative processors for supplies. However, CVE limits nonmember business to retain its cooperative tax status.

CVE sells both directly and through a system of agents, most of whom handle retail, institutional, and industrial markets. Export sales of \$20 million to \$30 million annually support a staff of 8 to 10 export marketing specialists.

CVE is a member of PACE, a Webb-Pomerene association that has achieved reduced freight rates from ocean shipping conferences. Most CVE sales are priced on a cost and freight (c.& f.) basis to take advantage of economies in freight procurement. Because of the volume shipped by CVE, a commercial freight forwarder has located a representative in the CVE offices. This results in personalized service as well as access to the forwarder's own network of worldwide contacts.

Market information is obtained through agents, one or two annual visits to customers, and industry contacts. USDA reports are received but frequently are distributed too slowly to be useful in current trading.

At one time, another cooperative, Pacific Coast Producers, also participated in CVE. It was smaller than other participants and had different marketing needs. CVE found disad-

⁵Ray A. Goldberg, "Profitable Partnerships—Industry and Farmer Co-ops," *Harvard Business Review*, Vol. 50 (2) (March-April 1972), pp. 108-112.

vantages of dissimilar interest outweighed advantages of increased volume contributed by the third cooperative. Thus, that arrangement was terminated.

CVE has considerable interest in diversification and further development. Much of CVE volume has been fruit cocktail and canned cling peaches. Increased product diversification is seen as a means to increase volume and even out product flows to make better use of personnel and reduce transportation and market information costs.

CVE activities include both horizontal and product extension coordination. While the original basis for its development was horizontal coordination to avoid destructive export competition, achievement of economies in export marketing has provided impetus for product extension. Further extension into dry fruits and tree nuts may complement this process.

An interesting development that may affect future activities of CVE is Tri/Valley's acquisition of S&W Fine Foods. S&W sells a branded commodity with considerable goodwill developed for its brand name. S&W is expected to benefit from shipping cost advantages of CVE, but export marketing functions have remained separate.

The issue of brands and trademarks is somewhat complicated in a joint venture where members have their own brands and investment in overseas promotion. Due to economies in promotion, it would appear advantageous for a joint arrangement to export a common brand or a full line under a common brand, although processed products that are exported often are packed under private labels. Agreement on choice of a common brand, even if irrevocably assigned to the joint venture, and contingencies in the event of dissolution should be dealt with. CVE has not yet resolved these issues. In light of availability of government incentives for branded promotion overseas through the FAS Export Incentive Program, it may be foregoing some possible advantages.

JV Case 2—Diamond/Sunsweet.⁶ Diamond/Sunsweet was a cooperative marketing association formed in 1975 to handle domestic and export marketing for Diamond Walnut Growers Association, Inc., and Sunsweet Growers, Inc. Through this arrangement, the two cooperatives shared overhead costs of facilities and specialized export personnel. Exports accounted for about 25 percent of Diamond/Sunsweet's total sales volume and were handled by an internal staff of 3 full-time persons who worked through a system of 60 foreign agents, distributors, brokers, and manufacturers' representatives who made sales directly

⁶After field interviews were conducted, Sunland Marketing merged with Diamond/Sunsweet to become Sun-Diamond Growers of California.

to foreign customers. Internal personnel also arranged transportation and documentation.

Products handled by Diamond/Sunsweet included: walnuts, prunes, and assorted dried fruits, some of which were marketed for another cooperative. Export market development has been important to both Diamond and Sunsweet, because production is increasing, while domestic use of walnuts and prunes has been rather static.

The joint marketing arrangement permitted producers of both commodities to get greater sales attention on a seasonal basis than justifiable by their individual sales volumes and also permitted customers to contact a single supply source and receive all products on a single invoice. Diamond Walnut and Sunsweet growers achieved higher returns and paid lower per-ton sales costs. Services of agents and sales personnel and costs for such services as data processing also were shared.

Overseas promotion activities jointly promoted both Diamond and Sunsweet brands, supported, in part, by the FAS Export Incentive Program. Brands were found to be important in retail markets, but price is a larger factor in sales to industrial importers. The formation of Sun-Diamond broadened the product line of Diamond/Sunsweet. Experience suggests that an individual sales person can effectively handle four or five complementary "branded grocery products" and can achieve a lower cost per ton than is possible with a single product. While costs can be lowered, it is important to maintain adequate staff and commodity expertise to service buyer needs. Effective marketing also requires control over product supply. Diamond/Sunsweet was the exclusive marketing agency for members' production and was able to allocate product to domestic or export markets.

JV Case 3—Alfred C. Toepfer International. In mid-1979, seven North American cooperatives announced an agreement to set up a joint venture with four European cooperatives and Alfred C. Toepfer Verwaltung-Gm.b.H. of Hamburg, West Germany.⁷ The cooperatives formed a joint

⁷The North American cooperatives included: Indiana Farm Bureau Cooperative Association, Inc., Indianapolis, Indiana; Gold Kist, Inc., Atlanta Georgia; Agway, Inc., Syracuse, New York; Citrus World, Inc., Lake Wales, Florida; Land O'Lakes, Inc., Minneapolis, Minnesota; Landmark, Inc., Columbus, Ohio; and United Cooperatives of Ontario, Mississauga, Ont., Canada. The European Cooperatives included: CEBECO- Handelsraad, Rotterdam, the Netherlands; GIG-Verwaltungsgesellschaft, Duisburg, Federal Republic of Germany; Deutsche Raiffeisen-Warenzentrale, G.m.b.H., Frankfurt, Federal Republic of Germany; and Union Nationale des Cooperative Agricoles de Cereales, Paris, France.

organization, Intrade, which purchased a 50-percent interest in the commodity trading portion of the Toepfer organization. Other portions of the Toepfer organization including feed mills, a port elevator, ocean vessels and ocean freight chartering, and other banking and farming interests were not included in the joint venture.

The Toepfer organization has traded in grains, oilseeds, and major feed ingredients since 1919. It now operates in every major grain exporting nation and most major importing nations. The joint venture links Toepfer with U.S. supply sources for grains, oilseeds, and feed ingredients, while giving the cooperatives access to an international trading network with offices, experienced personnel, and the ability to provide information on market conditions and trade possibilities around the world.

While all U.S. cooperatives participating in the organization have some interest in grains, oilseeds, and/or feed ingredients, three members—Land O'Lakes, Agway, and Citrus World—all have considerable interests that would benefit from any expansion of activities into processed and branded commodities. Plans are for the commodity orientation to remain limited to trade in bulk ingredients for at least the next several years.

Participants in Toepfer International decided the most attractive approach to entering the world grain trade is to acquire an existing trading company. Most U.S. cooperatives involved in trading bulk commodities have been hesitant to expose themselves to the risks of c.i.f. sales and handling commodities of non-U.S. origin. Through acquisition of a part of Toepfer, they can share those risks with experienced personnel, while gaining access to a network capable of supplying information and commodities from multiple sources.

Joint Venture Prospects. Toepfer International has not been in existence long enough to permit an evaluation of its success, and it is premature to further speculate on its future. It does indicate, however, that cooperative-noncooperative agribusiness joint ventures offer one means of rapidly gaining access to export marketing systems. Trade-offs include purchase price, ability to control objectives, conflict in export objectives and policies, and direction of growth. However, the ultimate goal of seeking means to increase long-term average returns to producer-members of U.S. cooperatives should be kept in perspective in evaluating potential of international joint venture arrangements.

These examples have indicated some opportunities for use of joint ventures to develop sales volume necessary for taking advantage of functional economies in the export process, particularly in transportation, information, sales, financial factors, risk bearing, and management.

Cooperative-noncooperative joint ventures offer potential for cooperatives to enter export markets. Many large non-cooperative firms have substantial processed food sales overseas. Although potential for cooperative-noncooperative collaboration may exist, similarity of interest must be carefully examined. Joint ventures present opportunities for coordination where mutual interests are compatible, whether partners are cooperative or noncooperative firms.

Webb-Pomerene Associations (WP)

Under the Webb-Pomerene Act of 1918, U.S. firms are permitted to form export trade associations that agree upon export prices and allocate foreign markets with limited antitrust immunity, provided they do not interfere with domestic competition. This mechanism for coordination of export marketing can be used by cooperatives and noncooperatives.⁸

Activities deemed permissible under the Webb-Pomerene Act, as listed in a court decision involving a Webb-Pomerene association, included:

- Recruiting four-fifths of the firms in an industry into one association,
- Assigning stock in an association according to quotas or member production,
- Committing members to use the association as their exclusive foreign outlet,
- Refusing to handle the exports of U.S. competitors,
- Determining quotas and prices at which each member should supply products to the association,
- Fixing resale prices for foreign distributors, and
- Limiting foreign distributors to handling only member products.⁹

Under terms of the Act, Webb-Pomerene associations are not permitted to restrain trade in the United States, restrain the foreign trade of any domestic competitor of the association, and artificially or intentionally influence prices within the United States.¹⁰

⁸For a more detailed discussion on Webb-Pomerene Associations see Mark D. Newman, "Exports and Antitrust: Webb Pomerene Associations and Agricultural Exporters," *The Agricultural Law Journal*, (Fall 1980), pp. 434-449.

⁹U.S. v. Minnesota Mining and Manufacturing Company, et.al., 92 E and F Supp. 965 and 966 (1950). The case involved Durex Abrasives Corporation and is generally cited as "Durex."

¹⁰15 U.S.C. 62.

The prohibition against domestic price influence required some judicial interpretation. One could argue every export sale would influence prices in the United States. The courts have held, however, that if exports by an association result in only "inevitable consequences," an export association is not unlawful restraint.¹¹

Judicial interpretation has specified several other forms of restricted conduct. In the Durex case, it was held that while members could agree to export only through an association, they could not use the association to limit exports to market areas that members could supply more profitably from foreign production facilities.¹² Price fixing in conjunction with foreign competitors was ruled unlawful in the Alkali Export Association case.¹³ Furthermore, the court has held that while agreements not to withdraw from an association or, at least, not to export independently could be made in the interest of stability, reasonable provision for withdrawal must be provided.¹⁴

Court interpretations have prohibited use of Webb-Pomerene associations in transactions, "...initiated, controlled, and financed by the United States Government (even where)... a foreign government is the nominal 'purchaser'."¹⁵ This, in effect, prevents associations from being used to bid on U.S. foreign assistance procurement. The justification is that such sales are not exports, since, "...the burden of noncompetitive pricing (falls), not on the foreign purchaser, but on the American taxpayer..."¹⁶ Use of Webb-Pomerene associations in bidding on P.L. 480 contracts is also precluded.

Use of Webb-Pomerene Associations. A Federal Trade Commission (FTC) study found that only 1.5 percent of total U.S. export sales in 1976 were assisted by Webb-Pomerene associations.¹⁷ The study reported 32 associations registered with the FTC in 1978, 9 of which handled agricultural commodities. Activities performed by 26 Webb-Pomerene associations during 1976 are summarized in table 1. Many associations perform multiple functions. Fourteen conducted exports under a joint association name. Eleven engaged in negotiation of shipping arrangements,

including freight consolidation, rate negotiation, and ship chartering for individual member exports and the associations as a whole. Eleven other associations shared export market research and analysis.

Potential for use of Webb-Pomerene associations for functional coordination can be illustrated through a look at some of the associations in which farmer cooperatives participate.

Table 1—Functions performed by Webb-Pomerene associations, 1976.

Function	Activity	Number associations performing
Transportation and physical distribution	• Freight consolidation rate negotiation ship chartering	11
	• Foreign storage or distribution facilities	2
Market information	• Market research and analysis of export markets	11
	• Statistical services	8
Sales	• Exports in name of association	14
	• Sales agent from offices within U.S.	8
	• Sales agent from foreign sales offices or through foreign sales agents	6
	• Cooperative bids or negotiation of sales with foreign governments and international organizations	5
	• Sales to U.S. for delivery outside	—
	• Allocating business among members	3
	• Setting prices	8
	• Credit information and collections	8
Documentation	• Uniform rules, terms of sale or contracts	6
	• Monitoring U.S. legislation and regulatory activities	4
Regulation	• Monitoring foreign legislation and regulation	3

¹¹92 F. Supp. 965.

¹²Ibid.

¹³US v. United States Alkali Export Association, et al., 86 F Supp. 59 (1949).

¹⁴92 F. Supp. 966.

¹⁵U.S. v. Concentrated Phosphate Export Association, Inc., et al., 393 U.S. 199 (1968)

¹⁶Ibid.

¹⁷Federal Trade Commission, "Webb-Pomerene Associations: Ten Years Later: A Staff Analysis," November 1978, p. 15.

Source: Newman, Mark D., Exports and Antitrust: Webb Pomerene Associations and Agricultural Exporters," *The Agricultural Law Journal*, (Fall 1980), pp. 439-40. Federal Trade Commission, Webb-Pomerene Associations: Ten Years Later: A Staff Analysis," November 1978, p. 12.

WP Case 1—California Avocado Export Association (CAEA)

(CAEA). CAEA has five members including Calavo Growers of California, a cooperative. In addition to being a Webb-Pomerene association, CAEA is a nonexempt, federated farm cooperative. The association functions as a joint market development and sales agency for members' exports to Japan and Hong Kong. Members use a common export brand, AVOCAL, and coordinate market information, promotion, pricing, sales, and shipping. The manager is a hired employee of the association. He makes sales for members, preparing cost, insurance, and freight (c.i.f.) price quotations based on a monthly f.o.b. packinghouse price agreed to by members. Sales are allocated by the manager on the basis of product availability.

Association members benefit from marketing economies in information, promotion, sales, and transportation. At the same time, they avoid cut-throat competition and disorderly marketing, which could be particularly destructive to marketers of fresh produce. One purpose of the association is to develop market outlets for production from increasing California avocado acreage. While members of CAEA handle other commodities, the organization currently deals only in avocados. CAEA has conducted trials to test physical compatibility of avocados and citrus in shipments to the Far East. These eventually may lead to some coordination of activities with marketers of other commodities.

WP Case 2—Citrus Shippers United (CSU). CSU is an association of 29 cooperatives that coordinates marketing of members' fresh citrus in Western Europe. Most sales in European fresh fruit markets are made on a consignment basis. As a result, the European market is more risky and often less profitable for California citrus producers than other export markets. The risks are compounded by high transportation costs and competition from state marketing agencies that can maintain themselves in a market at prices below production costs. Bad planning and lack of coordination among U.S. shippers, which sometimes has led to extreme buyer bargaining advantage, when five or six vessels carrying California citrus arrive simultaneously, also has added to risk.

CSU was formed in 1977 in an effort to make sales to Western Europe more profitable. The association is set up to perform a full array of export marketing functions, with Pure Gold, Inc., a cooperative, and Riverbend Farms, Inc., dividing administrative responsibilities. The overall objective of CSU is to provide for orderly and profitable marketing of California citrus in Europe.

Achievement of economies through coordination of effort is seen as a benefit to growers and shippers. Transportation economies are achieved through vessel chartering and coordinated container shipments. Economies in sales are sought

through common use of European marketing representatives and a joint brand label. Physical risk is controlled through common insurance standards and a self-insurance scheme to cover fruit decay. CSU has a paid representative who meets shipments in Europe to monitor quality of fruit on arrival. This helps assure quality standards are upheld and prevents fraudulent damage claims, which increase costs of risk coverage. Documentation and financial functions also are coordinated through CSU. Smaller shippers gain access to marketing expertise, which would be too costly on an individual basis.

Although CSU was established to handle marketing activity in Western Europe, its members also have considerable trade with the Far East. In 1978-79, the Far East market was more profitable than the European on a per-carton basis. Heavy frost damage to California's citrus crop in 1978-79 resulted in severe curtailment of total production. Sales to Europe, the least profitable market, were severely reduced by all California producers.

CSU exemplifies the potential use of a Webb-Pomerene association as a vehicle for reducing export marketing costs for cooperatives that do not handle a majority share of total U.S. production.

WP Case 3—Northwest Fruit Exporters (NFE). NFE is an association of 25 Washington and Oregon cherry shippers developing exports to Japan.¹⁸ The group was formed to serve as a negotiating team recognized by the Japanese government. Before 1978, fresh Pacific Northwest cherries had not been permitted to enter Japan due to fear of infestation by codling moths. NFE successfully demonstrated that fumigation with methyl bromide is effective in eliminating danger to the Japanese industry from both codling moths and western cherry fruit flies. The association's exports to Japan grew from 140,000, 20-pound cartons in 1978 to 225,000 cartons in 1979.

NFE acts as a sales agency, setting prices and assigning quotas to members. It collects a per-box assessment that, among other things, pays for the cost involved in having a Japanese inspector present in the United States for fumigation and packing, too costly for all but the largest individual shippers.

NFE is entering further negotiation with the Japanese government to permit lower fumigation temperatures. The association also is working with USDA and Washington State University researchers in evaluating export transporta-

¹⁸"Fresh Northwest Cherries on Way to Japan," *The Goodfruit Grower*, (July 1, 1979), pp. 1-2, 10.

tion and handling methods and their impact on product quality and sales life.¹⁹

Here is an example of an association that has gone beyond sales and marketing to change the regulatory environment in which it must function. Many individual cooperatives face tariff and nontariff barriers in foreign markets, which they find difficult to get modified. A Webb-Pomerene association may serve to coordinate cooperative action to bring about changes in import restrictions.

WP Case 4—Pacific Agricultural Cooperative For Export, Inc. (PACE). PACE is a 14-member association that seeks to assist and promote export of raw or processed food or other agricultural products of its members. The primary emphasis of PACE activity has been to seek reductions in export transportation costs for its members.

PACE claims to have achieved ocean conference rate reductions of as much as 50 percent. On one product, this amounted to savings of \$55-\$60 per ton. It also has explored “nonconference” shipping options and worked with Southern Pacific Railway in developing options for shipping member products to Gulf ports by rail and then by ocean vessel to Europe.

PACE membership includes six U.S. farmer cooperatives. It retains an executive secretary to handle administrative affairs, act as a spokesperson, evaluate new trends in shipping, and suggest strategy. One advantage of an independent administrator is that he or she can be concerned with the overall view of group problems and solutions.

PACE is an example of use of the Webb-Pomerene law to coordinate activities within single export functions. Some members interviewed voiced an interest in expanding activities into additional functions. Others felt restriction of activities to a single function enabled collaboration among exporters with such diverse marketing interests, they would be unwilling to collaborate on a broader basis.

WP Case 5—California Rice Export Corporation (CREC). CREC is an association of four California rice marketers, including two farmer cooperatives. The association was established to permit export coordination in sales to Okinawa rice importers. CREC served as a common agency for discussion with importers and as a mechanism for sharing sales greater than 500,000 tons.

Most of CREC's export sales were financed under P.L. 480. Thus, when the Supreme Court decided in 1968 that P.L. 480 sales were not “exports” protected under Webb-Pomerene, the association's usefulness decreased markedly. It has remained registered but inactive since that time.

Despite its current inactivity, CREC is indicative of a type of arrangement that could permit individual cooperatives to participate in transactions involving orders larger than they could fill alone. Orders for rice that were handled previously by CREC are now handled by a major rice company, which then acts as a broker and arranges for purchases from smaller cooperatives and noncooperative companies.

Webb-Pomerene Prospects. Webb-Pomerene associations have been most successful in horizontal coordination of exports of undifferentiated products in concentrated industries. Coordinating exports from large groups of producers is difficult. Broadly based coordination efforts have succeeded when group action is limited to performing specific export functions.

One FTC study suggested these major reasons for dissolution and inactivity of WP associations during the 1958 to 1962 period:

1. Associations applied for registration before assessing export market opportunities.
2. Members were unable to agree on prices, market shares, or other aspects of association activities.
3. Members' production was too diverse to be marketed through a single agency.²⁰ In addition, business leaders have complained ambiguity in the roles of the Federal Trade Commission and the Department of Justice in antitrust exemption restricts use of these associations.

Congress is considering legislation that would strengthen the role of export associations formed under the Webb-Pomerene Act. If this legislation is passed, cooperatives and other agribusinesses may consider using this act as a basis for coordinating exports. The Webb-Pomerene mechanism can complement some organizational arrangements mentioned previously.

Webb-Pomerene associations can perform a broad range of functional coordination activities. A joint sales agency that sets price and establishes quotas among members, as provided by the act, is exemplified by the California Avocado

¹⁹Gilbert E. Yost, James B. Fountain, and Charles Pierson, “Shipping Fresh Cherries into Japan Involved Careful Industry Monitoring,” *The Goodfruit Grower*, (June 1, 1979), pp. 6-7.

²⁰Federal Trade Commission, *Webb-Pomerene Associations: A 50-Year Review*, (1967), p. 24.

Export Association. Where cooperatives and others are able to collaborate, this level of coordination offers access to economies throughout the export marketing process. Limits can be expected on the ability to coordinate widely diverse commodities, but several product extension opportunities may be developed.

Some associations limit their activities to negotiation for the performance of specific functional services, as PACE does in ocean transportation. Such arrangements present the opportunity to coordinate activities of cooperatives and others handling diverse products that share similar requirements for specific functions. By limiting the scope of activities of an association, bringing together significantly larger numbers of participants may be possible. This can increase potential to counter or directly influence those who control a specific function, as is the case with ocean freight conferences.

Supply-based coordination may take the form of associations organized to permit members to bid jointly on contracts that would be too large for them to bid on as individuals. This is the type of activity in which the California Rice Export Association participated.

Demand-based coordination through associations may take the form of joint market research or promotion. It also may involve joint negotiation with foreign governments on licensing, import quotas, or other regulations, as Northwest Fruit Exporters does. In each instance, interdependence of export marketing functions must be recognized. A cooperative with limited expertise in performing all export marketing functions may be unable to reap the benefits of economies of coordination for a single function.

Examples of export coordination through Webb-Pomerene associations draw together cooperatives with other agribusinesses. The link is either through similarity in commodities handled or export marketing services used. Cooperatives that feel their export marketing success is at least as closely tied to noncooperative competitors as to other cooperatives, may find the Webb-Pomerene Act an opportunity to coordinate exports with them.

OPPORTUNITIES FOR COORDINATION OF EXPORT MARKET FUNCTIONS

Domestic and export marketing processes are basically similar in that both are oriented toward providing consumers with products in the form, time, and place desired. However, organization and management of a successful export marketing program requires special knowledge and skills in assessing market opportunities, legal and financial arrangements, and logistical procedures for processing and delivering products to foreign buyers.

Table 2—Export marketing functions and important elements in assessing coordination potential.

Function	Important elements
1. Procurement	<ul style="list-style-type: none"> • Product commitment • Marketing strategy based on average return • Allocation between domestic and export markets • Transfer pricing
2. Processing	<ul style="list-style-type: none"> • Complementarity in facilities • Product standardization vs product differentiation • Ability to respond to foreign tastes and preferences
3. Transportation	<ul style="list-style-type: none"> • Domestic and international linkages • Bulk vs general cargo shipments • Size and regularity of shipments
4. Market information	<ul style="list-style-type: none"> • Market knowledge and/or market intelligence • Major fixed costs • Single-source exporter vs multi-commodity, multinational trader • Trading presence in individual markets • Vertical coordination and bargaining advantage
5. Sales	<ul style="list-style-type: none"> • Representation • Promotion • Pricing • Servicing
6. Financing	<ul style="list-style-type: none"> • Terms of payment and collections • Costs of inventories and receivables • Foreign currency exchange
7. Documentation	<ul style="list-style-type: none"> • Specificity of terms of compliance • Transfer of goods and payment • Regulatory compliance
8. Risk management	<ul style="list-style-type: none"> • Pricing risks • Commercial risks • Foreign exchange risks • Political risks • Physical risks
9. Regulatory	<ul style="list-style-type: none"> • Tariffs, quotas, and subsidies • Health and safety standards and labeling requirements • Modifying trade regulations

For purposes of this study, the export marketing process was divided into nine component functions. All nine functions are required in exporting agricultural products, but detailed arrangements will vary among products. Table 2 identifies the functions and elements considered important in assessing potential for collaborative export marketing by farmer cooperatives.

Exporting functions are substantially interdependent. The central function is sales, which must be accompanied by closely coordinated activities in finance, information, documentation, and other functions.

Procurement

Procurement involves obtaining the right to sell a commodity and assembling the product. While procurement for export and domestic sales sometimes involves different grades of product and separate arrangements, the mechanics of procurement for a given commodity are similar for both markets.

Evaluating potential for cooperative export coordination in procurement involves three areas of concern. First, degree of member product commitment to cooperatives varies considerably. The marketing task for cooperatives that act as exclusive agents for their members' products differs from that of those whose members have no such firm commitment. Fruits, nuts, vegetables, poultry, and dairy products fall into the former category, while grains and oilseeds generally fall into the latter group.

Second, in allocating available supplies between domestic and export markets, some exporters are interested in market development, while others are only interested in sporadic sales.

Third, transfer pricing policies may be critical to the success or failure of any attempt at coordinating exports that require procurement of products from a number of cooperatives or even internal transfers between divisions.

Product Commitment. Arrangements for product procurement affect a cooperative's ability to plan investments in market development and to make sales for future delivery. Many cooperatives, especially those handling fruits, nuts, and vegetables, serve as exclusive marketing agents for their members. As such, they are responsible for sale of all member production and must concern themselves with its average overall return.

Producers often overlook the importance of a marketing strategy that emphasizes maximization of average return to total production. Cooperatives often must compete with other handlers who can pay a higher price than the cooperative's average return but who are willing to purchase only a fraction of farmers' total production. Membership agreements that commit producers to sell all their output through their cooperatives decrease the cooperatives' uncertainty as to what they must sell. Such agreements also permit cooperatives to make forward sales and capital commitments necessary to maximize average return to growers' total production.

Many cooperatives use pooling as a mechanism for procuring products to be merchandised. Producers receive the average price for the entire pool adjusted for the quality of product delivered. Pools vary in ways of differentiating among product uses and destinations and procedures for allocating overhead costs.²¹ In some cases, separate pools have been established for exported products and those sold in domestic markets. Where quantity of production sold in export markets affects amount available domestically, it may also affect domestic price. In recognizing this interdependence, some cooperatives do not distinguish between returns in export and domestic sales.

Pooling and exclusive marketing agreements are common in procurement of fruits, nuts, vegetables, cotton, and rice. Although cash markets prevail for wheat, feed grains, and oilseeds, some initiatives in pooling are underway. Far-Mar-Co, Inc., for example, has developed a wheat pooling program called Promark.

Product Allocation. The second major concern in procurement is the basis for allocating available supplies between domestic and foreign customers. This will determine whether exporting is to be approached as a market development activity or as an outlet for surpluses.

Many cooperatives treat export markets as an outlet for surpluses. Poultry exports sometimes are treated as such, in part, due to the difficulty of competing with subsidized European exports. Export marketing for many fruits and nuts began on a sporadic sales basis but has been transformed into full-scale market development. In the case of almonds, "exclusive agency" arrangements, combined with expectations of major production increases, provided impetus for major initiatives in development of both new products and broadened export markets.

Uncertainties affecting production always will result in some variability in supplies to both export and domestic markets. Storage provisions under some marketing orders, such as those for almonds and raisins, are one mechanism for stabilizing supply over time in a manner consistent with market needs. Where storage is not possible, a critical issue is whether the burden of adjustment to supply fluctuations will be shared among markets or allocated entirely to export markets. If investment in export market development is to be economically feasible, some long-range provisions for export procurement must be made.

Cooperative exporters procure products by: (1) signing annual membership agreements and establishing allocation

²¹T. M., Hammonds, *Cooperative Market Pooling Circular of Information 657* (Corvallis, Ore.: Oregon State University Agricultural Experiment Station, 1976).

rules among markets, (2) taking member production but arranging for additional nonmember sources of product when required to satisfy demand, (3) signing marketing agreements to sell specified quantities of nonmember production during the marketing year, or (4) filling domestic demand and dumping excess production in foreign markets. Each approach has some advantages and disadvantages, and managers often face different constraints in member priorities and market opportunities.

Transfer Pricing. Many agricultural commodities move toward export markets through vertically integrated channels that extend from local elevators, packinghouses, or other local cooperative marketing agencies through regional and interregional cooperatives. As commodities move through these various cooperatives, they generate a series of bookkeeping transactions that require the determination of "transfer prices." Transfer price simply may reflect accumulated costs associated with actual services provided at each stage of product movement or administrative overhead and fixed facility costs. Allocating overhead costs is difficult, and export transactions may be overcharged or under charged.

As cooperatives get larger and develop multidivisional structures to handle diverse activities, importance of considering interrelationships between transfer prices, divisional margins, and managerial incentives increases. Often transfer prices provide the basis for calculating margins, which, in turn, form the basis for evaluating divisional and managerial performance. In such cases, incentives for management need to be consistent with the overall marketing objectives of the cooperative.

Other marketing strategies must be considered in establishing transfer prices. For some commodities, cooperatives may achieve higher total returns to agricultural producers by assessing lower handling charges on export shipments than on domestic products. This is a well-known and widely used pricing strategy in the industrial sector that segments markets geographically or through product differentiation. For agricultural commodities, this pricing strategy has been the basis of various "two-price" plans, under which the domestic price is higher than that for surplus commodities exported.

Economies of Size. Coordination advantages may arise where several related commodities are produced in the same geographic area. Such overlap probably would apply only to limited groups of commodities, such as corn and soybeans or apples and pears. Coordination advantages usually are greater in simultaneous procurement for both domestic and export markets of a limited number of commodities than in farm level procurement of a wide range of commodities for export. There are significant linkages between economies of size in procurement and transportation, discussed later in this report.

Processing

Processing changes the form of products and enhances their value to potential buyers. Some processing standardizes commodities into established grades acceptable to buyers. This is frequently done for such bulk commodities as grains, oilseeds, some feedstuffs, and some fertilizers and chemicals. Other processing differentiates products into specialized or branded products, such as fruits, vegetables, nuts, cotton, some feed ingredients, and some animal products.

Marketing strategies for standardized bulk products are oriented toward larger volumes and lower margins than those for differentiated products. Standardized bulk products generally are acceptable to buyers in many different countries, and specific exporter-importer relationships are often less stable. Market development efforts often emphasize improvements in efficiency that permit the exporter to be a low-cost supplier.

Marketing strategies for differentiated products are oriented toward responsiveness to tastes and regulations in specific foreign markets. Quantities exported are usually less than for standardized products, and per-unit margins usually greater. Frequently, significant cost is expended to develop desirable product characteristics and effective marketing strategies for each segment of the market. Hence, long-term market development orientation is important.

Product differentiation may be accomplished through branding, packaging, and providing services. Branding may differentiate a product or line of products and establish them as achieving certain quality standards. This may be translated into a price premium in certain markets. Some cooperatives successfully have developed export markets for branded products, among them California Almond Growers Exchange's "Blue Diamond Almonds," "Gold Kist" poultry, "Sunkist" and "Seald-Sweet" citrus, and "Diamond Fruit Growers'" apples and pears, and others.

Special services that differentiate products range from sale of bagged grain, oilseeds, or meal to special processing of fruit to reflect preferences in specific markets. In some export markets, for example, No. 2-1/2 cans of processed fruit are a preferred retail pack to the No. 303 can, popular in the United States. Also, Japanese consumers are said to prefer canned fruits that are firmer than those demanded by U.S. consumers. Special processing in response to demands of specific export customers presents marketing opportunities different from those in exporting standardized products. Exporters with access to facilities necessary to permit response to specialized demand have substantial opportunities.

Complementarity in Facilities. Exporting often requires specialized facilities. Specialization of facilities may be due to processing requirements unique to exporting or to required location of facilities, for example, at ports.

Exporting some commodities requires precise exporter control over scheduling and operation of facilities. In this case, exporters often own exporting facilities or enter into long-term lease agreements for them. Facility ownership or long-term leases increase fixed costs and risks and should be accompanied by a long-term commitment to exporting.

Other commodities can be exported through existing port facilities that exporters can utilize on a fee basis whenever they are exporting. Per-unit fees for using export facilities can reduce fixed costs and risks in exporting, especially for small or intermittent exporters. Exporting commodities by container allows the exporter to use existing container port facilities on a fee basis.

A multicooperative export organization including commodities requiring large investments in specialized export facilities faces the problem of allocation of capital costs among members. Members supplying commodities not requiring use of these specialized facilities cannot justify tying up their capital in facilities they cannot utilize. Prorating capital contributions according to potential or actual use of the facilities may be necessary to persuade some cooperatives to join multicooperative, multicmodity export organizations.

Grains and oilseeds require specialized export facilities. Cooperatives desiring to export can arrange "thru-put" agreements at port elevators. Such agreements usually are not adequate for significant long-term participation in exports. Also, grain at ports is often out of position to be marketed domestically. The relatively large cost of grain export facilities (a minimum of \$30 million) and their specialized function has caused several cooperatives to join in operating these facilities. Farmers Export Co. and Mid States Terminals, Inc., are examples of this coordination.

Processing for Product Standardization or Differentiation. A system of product standardization, such as grading for grains, permits buyers to choose among sources of supply without actual physical examination of the commodity. In such cases, price can be an important variable in the choice among sources of supply.

In contrast, marketing branded, processed products expands the range of variables involved in choice among sources of supply. While price may remain an important factor for the purchaser, commodity attributes and special sales conditions also enter into the comparison process.

Transportation and Physical Distribution

Transportation and physical distribution include domestic and international freight, intermodal linkages, and related services necessary to deliver goods from point of production to final destination during an agreed-upon time period, without unnecessary quality deterioration. This involves buyers, sellers, and transportation specialists, such as freight forwarders and traffic managers. Those who physically move products such as trucking companies, railroads, barge lines, ocean lines, tramp steamers, and air cargo companies also are involved. To the extent that transportation services are regulated, government is also involved in this function.

Transportation and physical distribution often make up a large portion of the delivered costs of export marketing. In the partially unregulated and sometimes highly volatile ocean freight markets, risks of changing rates may be even greater than risks associated with domestic commodity price fluctuations. Yet, opportunities exist to mitigate such risks while economizing on cost of transportation services.

Transportation often exhibits substantial economies of scale, especially for rail or ocean shipments. Unit-train rates for bulk commodities are significantly lower than single-car rates. Volume rates for "piggyback" rail shipments also are available. Greater export quantities may enable a shipper to negotiate lower ocean freight rates or to voyage or time-charter ocean vessels.

Lower freight rates for large-quantity shipments often are offset by increasing assembly and distribution costs. In addition, larger shipping and receiving facilities are required to avoid demurrage charges due to delays in loading or unloading carrier equipment.

Domestic Transportation for Exporting. Substantial changes are occurring in the domestic transportation industry. Sharply increasing energy costs have altered competitive relationships between transportation modes. Declining fuel tax revenues have decreased funds for highway construction and maintenance, while these costs have increased sharply. Changing government policies are allowing trucks and railroads greater freedom in rate setting and facilitating restructuring of rail lines. For the first time, waterway carriers are faced with a tax to help repay government costs for waterway improvements. These changes in domestic transportation can have a large impact on export operations.

Coordination of transportation activities is most likely to occur within two subgroups, bulk commodities and general cargo. Bulk commodities include both dry cargo, such as grains, soybeans, oilseeds and meals, and bulk liquids, such as soybean and cottonseed oils. General cargo includes ordinary dry packaged cargo and fresh and frozen cargo requir-

ing special handling, such as refrigeration or controlled-atmosphere facilities.

Bulk commodities. Large-volume rates on bulk commodities can be substantial, especially for rail transportation. Unit-train rates are often 25 to 30 percent less than single-car rates. Large-volume rates for barge or truck shipments usually are not discounted as much, but these can be significant. Decreased freight rates should be balanced against possible demurrage costs of \$10 to \$30 a day for rail cars, \$5,000 to \$15,000 a day for ships, and increased assembly costs, usually for trucks.

Opportunities for large-volume rate reductions on barge transportation is less than that for railroads. Large shippers often negotiate long-term rate agreements for barge transportation. While these agreements may reduce rates, their main benefit is to reduce variability of rates in the short run.

General Cargo. General cargo may be transported by air, rail, truck, and occasionally by water. Container shipments have made major inroads in transportation of general cargo. Containers are essentially truck trailers of 20-, 35-, or 40-foot lengths with removable chassis. Domestic transportation of containers can be by truck, rail, and barge, although barges are seldom utilized.²²

Most containers are transported to ports by trucks. Railroads, however, are important in some large-volume or long distance movements to ports. Although some specific commodity rates are published, most tariffs are set on a freight-all-kinds basis. Discounts on volumes of 10 to 60 trailers or containers sometimes are available.

- Two other discount rate arrangements that offer potential savings from coordination of shipments are minibridge and microbridge.

Minibridge service involves use of rail instead of ships between two U.S. port cities but utilizes a single bill of lading and a single rate. Substantial economies are available when large minibridge shipments are put together. On shipments between west coast ports and selected east coast ports, savings of about 20 percent per container may be realized on shipments of more than 60 containers, compared with shipments of 1 to 20 containers.

Microbridge shipments follow the same general principle as minibridge except that they originate at an inland point instead of a U.S. port. Thus, under microbridge, a shipment from Chicago to the Far East could go by rail to Long Beach

and then by ship to the Far East under a single bill of lading and a single rate.

Minibridge and microbridge arrangements are advantageous to shipping companies because they permit better use of available space and vessels and save costs of tolls in the Panama Canal. For shippers, they are advantageous because they often result in lower transportation costs as well as decreased transit times. Also, shippers have greater leverage in dealing with shipping conferences for ocean transport. For example, the Pacific Agricultural Cooperative for Export (PACE) is an association of west coast shippers who conduct a substantial trade volume between California and Europe. Before the availability of minibridge rates, individual shippers were unable to prevail upon ocean carriers in the Pacific Coast-European Conference to lower rates to enhance the competitive positions of California-produced agricultural products in European markets. The shippers had no economically feasible transportation alternative. A group of shippers and Southern Pacific Railroad established Southern Pacific Maritime Transport, a common carrier, to give west coast shippers a minibridge rate on shipments to Europe via gulf coast ports. With the establishment of a minibridge rate using gulf ports, California shippers were able to negotiate substantial rate reductions by Pacific Coast-European Conference carriers on ocean freight rates to Europe.

Economic advantages that can be achieved through coordinated arrangements for domestic transportation of commodities destined for export fall into two categories. First, economies of scale in transportation often result in lower shipping costs per unit through larger shipments. Second, bargaining power through coordination among shippers can be important in influencing costs and transportation alternatives. Innovative transportation alternatives may have implications for both domestic and international transportation, because they and pricing structures often appear to develop only under severe competitive pressures. An advantage of coordination among shippers may be that it can increase responsiveness of the regulated transportation system to user needs.

International Transportation. Farmer cooperatives offering products for export on an f.o.b. or free along side (f.a.s.) basis can export while dealing primarily with the domestic transportation system. Thus, the cooperative avoids risks in ocean freight or other international transportation arrangements. Transportation still must be arranged by some party in a transaction, however. If the buyer assumes this duty and risk, the exporter takes on the risk that buyer inefficiencies in arranging freight will reduce the competitiveness of the cooperative's products in foreign markets. Therefore, evaluating international transportation options has advantages.

²²The term "piggyback" rail transportation refers to trailer-on-flat-car (TOFC) and container-on-flat-car (COFC) service.

Movement of cargo from the United States to foreign destinations can be accomplished by ocean transport, air, or, for shipments to Canada or Mexico, rail or motor transport.

The domestic portion of an export shipment often can be handled by a shipper's domestic traffic department. With delivery to a port or even contemplation of a choice of port to ship through, additional expertise may be required. A cooperative may gain this expertise through training and experience, hiring new personnel, or using a freight forwarder experienced in international shipments.

Ocean transportation can be acquired through vessel ownership, chartering an entire vessel, or booking space on a vessel.

Chartering is of two basic types, time and voyage. Time charters exist when a vessel is chartered for a fixed period of time, ranging from a few days to several months or years. Voyage charters exist when vessel services are obtained for single or multiple trips between ports. Both time and voyage charters offer potential to reduce shipping costs below those of merely booking cargo space on a vessel. Chartering also introduces the risk of locking in a higher freight cost than that of competitors.

Type of vessel to be chartered is often a function of requirements of commodities shipped. Grains generally move in bulk on vessels with capacities ranging from 20,000 to 100,000 metric tons. In contrast, citrus shippers require smaller vessels with refrigerated holds into which break-bulk, palletized cargo, or refrigerated van containers are loaded.

Time charters and vessel ownership may offer opportunity for lower unit shipping costs compared with voyage charters, but much of the savings are realized by shipping full cargos and obtaining backhaul cargo. Agri-Trans Corporation, for example, has reduced its average costs of operating 320 barges by coordinating Gulf-bound grain shipments with backhauls of fertilizer. Seald-Sweet International ships Florida grapefruit to Japan on a ship, the Sunbelt Dixie, which returns laden with Toyota automobiles.

Vessels providing ocean freight transportation may be divided into three categories: liners, tramps, and private carriers.

Liners provide regularly scheduled service along specific routes at tariffs common to all members of a conference. Tramps provide irregular service with rates open to negotiation. Private carriers generally handle proprietary cargo, though they sometimes take on cargo, as tramps do. Liners are members of shipping conferences. Under the Shipping Act of 1916, as amended (46 USC 801), common carriers

are permitted to combine in conferences for the purpose of negotiating rates. Conferences are granted limited immunity from antitrust laws, provided their rates are filed with and approved by Federal Maritime Commission.

Tramps sail according to availability of cargo. Some are bulk product carriers, handling grain and other bulk products, while others are general cargo ships, handling break-bulk, separately packaged products. Tramps often carry commodities that move in sufficient volume to make it worthwhile to charter an entire ship, though sometimes loads may be topped off with small consignments. Where competition from tramps is quite strong, such as in bulk commodities, conferences often have an open rate that permits their members to negotiate with shippers.

For other commodities, shippers who agree to use only conference vessels on a given route often are granted a preferential rate on that route. For example, on a 1979 shipment of one container of canned cherries from New York to Hong Kong, the conference rate was \$157 per metric ton or cubic meter, while the nonconference rate was \$180.55. Thus, the shipper who agreed to use conference vessels exclusively on the New York to Hong Kong route would have saved about 13 percent.

Additional opportunities for cost savings in ocean freight transportation may be found through use of tramps. Rates charged by tramps are more variable, depending on short-run supply/demand forces, than those of conference carriers (fig. 2). To compete, tramp vessels must offer rates so low they compensate the shipper for occasionally having to pay high noncontract rates on conference vessels. They also may offer service comparable to that of conference vessels in quality and frequency, so shippers will not need the services of conference carriers.

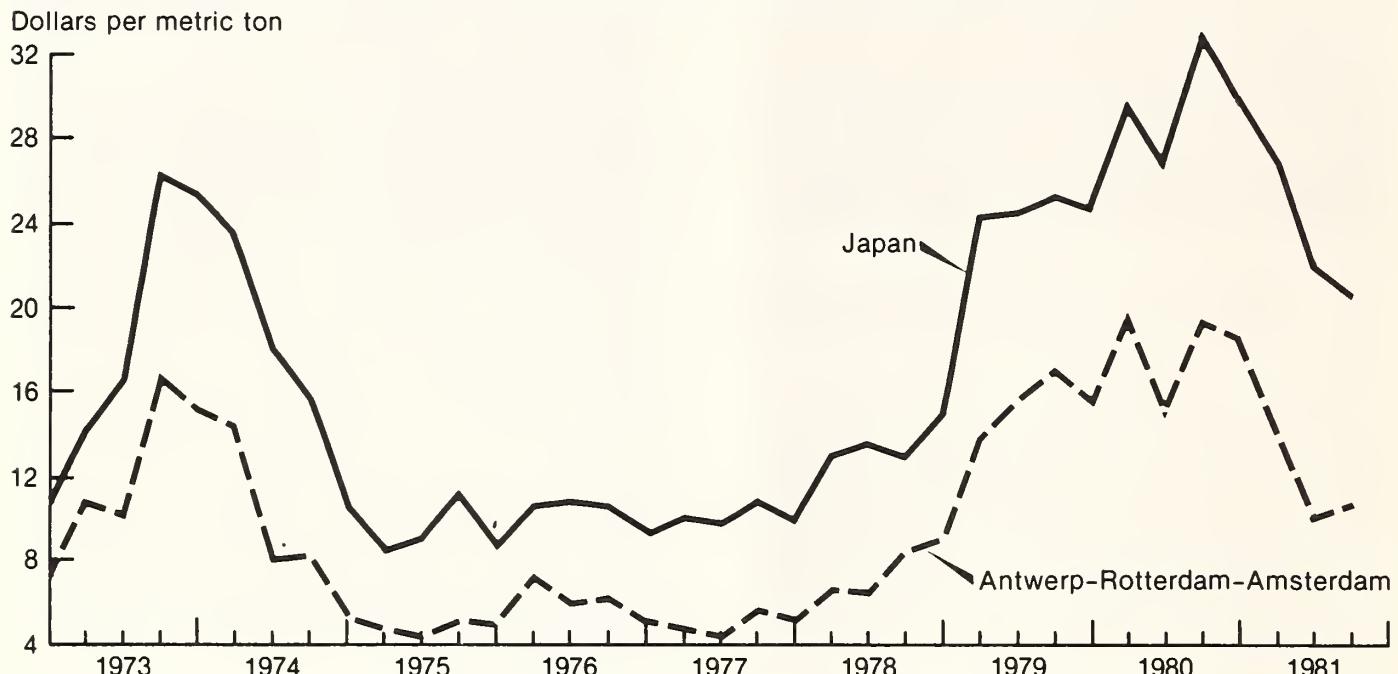
Nonconference carriers fall into two categories, small companies with slower, older break-bulk ships and larger carriers attempting to develop larger market shares. Smaller companies may charge 10-15 percent less than conference rates, but their sailing schedules may be irregular. Their older vessels carry risks that may raise insurance costs enough to outweigh other freight cost savings. Larger, non-conference carriers increasingly include service offered by Soviet bloc countries' vessels. In some cases, these carriers are reported to cut rates by as much as 40 to 60 percent to get business and foreign exchange.²³

Many shippers interviewed stated nonconference service was equal in quality to that of conference carriers. Some west coast shippers stated that on European routes, tramp

²³"COMECON Shipping," *European Community*, (July/August 1978), pp. 51-52.

Figure 2

Ocean Freight Rates from U.S. Gulf to Northern Europe and Japan, 1973-81¹



¹Ocean freight rates are quarterly averages based on reported shipping contracts for grain. However, because some grain shipments are not covered, average rates should not be considered precise estimates.

Source: J. Michael Harris, "Ocean Freight Rates for Major Agricultural Exports Increase Further in 1980," *Foreign Agricultural Trade of the United States*, U.S. Department of Agriculture, Economic Research Service, Washington, DC, July/August 1981.

rates were generally 15 percent less than the conference rate. On Far Eastern routes, tramp rates were more volatile, and no rule of thumb applied.

Nonconference shipping options may be important to cooperative exporters and other shippers as transportation alternatives to conference carriers. Without such alternatives, ability of shippers to influence carrier ratemaking will be constrained severely. This, in turn, will influence the competitive position of agricultural products abroad.

Containerization is becoming increasingly popular in both domestic and international transportation. Each 20-foot unit can carry a gross weight of about 20 tons. Although containerization necessitates relatively major capital investments in containers, loading facilities, and specialized vessels, it permits combinations of many different commodities on a single vessel. It also reduces labor handling cost, pilferage, damage, spoilage, loss, and transit time. Additionally, decreased loss claims result in lower insurance costs.

Containers can be transported on roll-on/roll-off (ro/ro) vessels, where containers on a chassis or semitrailer are moved by wheeled vehicles or lift-on/lift-off (lo-lo) vessels, where gantry cranes are used for loading and unloading. A

container vessel can be loaded and unloaded in about 20 percent of the time required for a similar break-bulk freighter. Modern container ships are also both faster and larger than traditional break-bulk vessels. In the early 1960's, a vessel at 10,000 gross registered ton (grt) was considered large. Now container ships may be as large as 55,000 grt, with a capacity to carry up to 2,000, 20-foot containers and move at speeds of up to 33 knots.

Containers with refrigeration capacity and controlled atmosphere as well as regular dry containers are available. This permits container shipment of a wide variety of fresh and processed fruits and vegetables, meats, dry beans, rice, and cotton.

Only a few ports have developed extensive container facilities. The high cost of container ships encourages shippers to minimize nontravel time. Thus, most container ships only call at larger ports. To participate in container shipment requires domestic movement of containers to a larger port.

Also, the high cost of containers often makes carriers reluctant to allow containers to move great distances inland to pick up freight. If possible, they prefer the quicker turnaround of truck shipment from locations near the port.

While almost all commodities can be shipped in containers, the per-ton cost of large bulk shipments of commodities such as grains make their shipment cost by container prohibitive except where they have high value as with seed. Here, sales tend to be smaller, and bulk handling would present risks of quality deterioration.

Potential Economies of Coordinating International Transportation.

Coordinating international transportation may generate benefits in four areas: (1) chartering ocean vessels, (2) generating a regular and large volume of general cargo movements, (3) consolidating small shipments into larger lots, and (4) improving the bargaining position of shippers through joint action.

Chartering vessels on either a time- or voyage-charter basis offers opportunities to reduce shipping costs but also requires assumption of considerable risk when dealing in volatile freight markets. This means chartering has potential to lock in higher as well as lower freight costs than competitors. For grain exporters in particular, a major benefit in chartering vessels is the increased number of potential buyers.

While freight rates are volatile, competition in world grain markets is such that the difference between high and low bids on many large contracts and public tenders is often only \$2 per metric ton. Freight rates can be a critical factor influencing cooperative export sales and member returns. Opportunity for large profits exists, but so does potential for large losses. Cooperatives can best evaluate these issues as part of an overall risk management strategy.

Opportunities also exist for cooperatives handling general cargo commodities to benefit from ocean freight chartering. For example, Sunkist Growers, Inc., has a major ocean freight voyage chartering program for shipments of fresh citrus to markets around the world. The vessels involved are refrigerated and smaller than those carrying grain. While differences in the type of vessels chartered would seem to preclude advantageous coordination in transportation among shippers of bulk commodities and those requiring refrigerated general cargo space, opportunities exist for coordination among shippers of commodities with similar stowage requirements.

In voyage chartering a large amount of cargo space on a regular basis, cooperatives have successfully developed agreements with nonconference lines to achieve high-quality service at lower cost. In one such case, a cooperative leader noted this also resulted in a reduction of conference rates for the cooperative's competitors. The overall effect was to make U.S. products more competitive in foreign markets. In other cases of large-volume general cargo movements, economies have been obtained without chartering entire vessels. In a case mentioned previously, PACE has been

able to realize cost savings through its ability to influence conference rates. In 1973, PACE claimed an average cost reduction of \$6 per ton.

Another area for potential transportation economies is consolidation of less than container load (LCL) shipments. Where shipments occur from a common port to a common foreign buyer or destination, consolidation may permit savings on freight costs, documentation, and other consular arrangements. However, such savings may be offset by increases in domestic assembly costs.

If a number of small shipments to a single foreign buyer are combined on a single bill of lading, shippers could avoid payment of multiple forwarding fees. Similarly, they could avoid multiple minimum freight charges and multiple charges for consular invoices required on exports to some countries.

Freight Arrangements. Exporters have a vast array of domestic and international transportation alternatives. To obtain needed services at the lowest cost, some exporters maintain international traffic departments, while others use services of international freight forwarders.

Freight forwarders perform a number of tasks, including booking space on ocean vessels; advising on shipping and market conditions; arranging land transportation to the most favorable port; arranging for proper packing, marking, invoicing, and other procedures to comply with buyer and foreign government requirements; tracing goods, if necessary, to assure vessel connections; arranging transfer of goods to the vessel after arrival at the port; consolidating shipments from different suppliers to a single buyer; arranging U.S. customs clearance and insurance coverage; and preparing consular invoices and banking and collection papers.

The forwarder receives a forwarding fee from the shipper and a brokerage fee or commission on the ocean freight bill from the carrier. Brokerage fees range from 1.25 to 6 percent of shipping cost. Some forwarders charge a lump sum fee for their services, so forwarding an LCL shipment would cost the same as forwarding 1,000 containers. One forwarder who follows this practice charges \$25 per bill of lading. Others charge separate fees for various activities. For example, some representative charges in 1977 were as follows: transportation arrangements and preparation and handling of a bill of lading, \$7.50 to \$50; preparation of a customs invoice and/or certificate of origin, \$2.50 to \$7.50; customs clearance or verification of an export license, \$2.50 to \$5; and banking services such as draft attendance or collection of a letter of credit, \$3.50 to \$10.²⁴

²⁴Alfred Murr, *Export/Import Traffic Management and Forwarding*, fifth edition, (Cambridge, Maryland: Cornell Maritime Press, 1977).

In considering costs of transportation arrangements, it is intuitively appealing for cooperatives to think of saving on forwarding fees and commissions on ocean freight and brokerage through an internal international freight department.

Analysis of advantages and disadvantages of such an approach can begin with a look at size and timing of an exporter's demand for forwarding services. If there is extreme variability in that demand, there may be a problem of peak loading, accompanied by the need to pay employees full time to have them available for periods of peak demand. Freight forwarders may be specialists, but they generally handle a broad enough range of commodities to balance out variable personnel demands.

Forwarders perform a number of services that can be performed by an internal freight department. The critical issue becomes one of identifying conditions under which these functions can be performed internally on a cost-effective basis. Some cooperative exporters have found this to be possible, while others have not. In one case, a freight forwarder has placed his own employee in a cooperative's office. This permits personal service required by the account, while maintaining advantages of the forwarder's own network of international offices and trade connections.

Warehousing and Distribution. As we have seen, there are economies in large volume and regularity of shipments in acquisition of transportation services. Ocean vessel chartering offers great potential economies but involves a concomitant increase in risks. Freight rates may decrease after a charter agreement is signed. If cargo space has been chartered, but the commodity is out of position or unavailable, the shipper may have to pay for dead freight space. If freight and commodities are ready to move before a buyer has been found, commodities may have to be "sold afloat."

Where high product perishability is not a problem, availability of warehousing and distribution facilities in or near export markets offers potential for holding inventories, mitigating somewhat the risks associated with "locking in" transportation services. It also may facilitate achievement of economies of large-volume transportation, while permitting more economical distribution to smaller volume customers. Additional benefits in ability to better service customers are also a possibility. Some cooperative personnel suggest cooperatives selling processed products also might benefit from joint warehousing and distribution facilities to service various European markets.

Potential for coordination of distribution activities is once again constrained by the distinction between bulk commodities and packaged goods. While advantages may accrue to both groups through coordinated foreign distribution systems, differences in facilities requirements and potential

customers would seem conducive to development of separate networks for physical handling.

Market Information

Ability to acquire and analyze market information is critical to successful operations in international commodity markets. Major multinational trading companies have extensive information networks and experienced commodity analysts and traders who depend on fast-moving information flows and rapid analysis as inputs to their trading decisions. U.S. grain marketing cooperatives have not had access to information systems comparable to those of the large international grain trading companies.

In assessing potential costs and benefits of investments in information systems, it is essential to distinguish between two types of information. One type is market knowledge, which primarily has long-term usefulness. This includes an understanding of market participants and their standard operating procedures; detailed characteristics of international markets for specific commodities; and language, customs of trade, and supply and demand situations in particular countries.

A second type of information is market intelligence, which primarily has short-term usefulness. This includes such things as current supply and demand conditions, short-term price movements, sales leads, anticipated changes in transportation and foreign exchange rates, and political actions that will affect commodity markets.

Information Sources. Market knowledge is developed over a long period of time. Its primary source is other market participants, trade associations, and researchers and analysts in public and private institutions. Libraries become repositories for a wide range of publications relevant to basic market knowledge. Educational programs of trade associations, public agencies, and universities supplement on-the-job learning experiences of professional commodity traders and market managers.

Market intelligence is generated through communication and bargaining between buyers and sellers, internal communication systems of firms, commercial and publicly supported market news services that assemble and report current market conditions, and a wide variety of published reports disseminated by public and private institutions. U.S. Department of Agriculture is a widely used information source for national and international commodity supply and demand conditions. It also provides some trade leads through Foreign Agricultural Service's Trade Opportunities Referral Services (TORS). However, much market intelligence is of value precisely because it is obtained rapidly from proprietary sources before becoming generally available.

Organizing Information Systems. Assessing feasibility of developing information systems to support expanded involvement of cooperatives in export markets carries four basic considerations.

First, there are substantial economies of scale in the development and operation of an international market information system.²⁵ This stems from the fact that large, fixed costs are incurred in establishing a basic network, but once the network is in place, additional bits of information can be acquired and disseminated at relatively low cost. Thus, traders operating in many markets usually enjoy an information cost advantage compared with single-source exporters. The trader can identify more sales opportunities over which to spread fixed costs.

Second, market intelligence information is perishable. Hence, ability of the system to collect and rapidly sort, analyze, and disseminate relevant information is critical to a trading operation.

Third, reliability and completeness of market intelligence is enhanced by actual involvement in trading activities. Third-party reporting systems are handicapped in obtaining all relevant details of market transactions.

Fourth, complexity of most commodity trading systems makes it operationally advantageous to have a high degree of specialization within a trading staff. Each staff person can then become skilled in assembling, utilizing, and transmitting market information for specific or closely related commodities.

Potential for Coordination. U.S. cooperatives handling a limited line of export commodities have been handicapped by a limited information system relative to large, multinational commodity trading companies.

The market intelligence network of the Continental Grain Company has been described as follows:

"Continental is plugged into virtually every major foreign government. Its listening network is like a vast news agency that never publishes a word ...

"Continental boasts an integrated worldwide communications system that feeds 5,000 messages each day into and out of the New York headquarters. Much of it comes from the Paris office where messages pour in from other offices and listening posts in Europe, Africa, Latin America, and the Middle East, reporting bids and offers for grain, crop

and weather conditions, political and economic trends—anything that affects the grain business, which is just about everything."²⁶

Cargill, Inc., and its Switzerland-based affiliate, Tradex, have an international market information network that covers an even broader range of commodities than does the system serving Continental.²⁷ Major international trading companies have made long-term investments in the development of skilled personnel who are the core of their information and trading systems. These information systems are tightly integrated with actual commodity trading activities carried out through an extensive set of foreign sales offices interconnected by modern communication systems.

U.S. farmer cooperatives can reduce their information disadvantage by coordinating information with other cooperatives. A Cooperative Trade Information Service (CTIS) has some potential for supplementing the existing U.S. Department of Agriculture's Trade Opportunity Referral Service and some commercial information services. However, the potential of a CTIS to quickly and accurately report current prices and trading conditions in foreign markets and to identify real trading opportunities is limited without direct involvement in arranging transactions. For this reason, other organizational alternatives that integrate information and trading systems hold considerably greater promise.

Some integrated arrangements have been undertaken by groups of cooperatives including: Farmers Export Company, California Valley Exports, Diamond/Sunsweet (now Sun-Diamond), and the cooperative participants in Toepfer International. The Toepfer arrangement is especially interesting, because it has resulted in cooperative ownership in an international trading company that has access to market information from trading operations in many countries.

In conclusion, there are substantial economies of scale in organizing and maintaining an information system to support cooperative export marketing, but the costs and benefits are tightly intertwined with other exporting functions, especially sales, finance, and risk management.

Sales

The sales function is the core of any exporting program. Achievement of a cost-effective sales effort is closely linked with other exporting functions, especially those of information and risk management.

²⁵Richard E. Caves, "Organization, Scale and Performance of the Grain Trade," *Food Research Institute Studies* 16 (1977-78), p. 115.

²⁶Morgan, Dan, *Merchants of Grain* (New York: Viking Press, 1979) p. 326.

²⁷Ibid.

Few cooperatives can afford to maintain an export sales organization with representation in every foreign market where their products might be sold. Coordination of effort among cooperatives may take the form of common use of sales agents or joint overseas sales offices, but geographic concentration of export marketing activities is an important consideration. Cooperative exporters can attempt to gain new or increased shares of existing export markets and/or emphasize developing markets that may offer greater growth in the long term. Japan, Canada, and Western Europe are traditional major markets for many agricultural commodities, but markets in other areas, such as the Peoples Republic of China and many developing countries, are growing and can be developed.

Market research focusing on general market knowledge will help identify sales potential and can suggest the best marketing strategies and product positioning for specific markets. Cooperatives sometimes can share the cost of market research and development, especially for commodities that flow through similar marketing channels.

Potential for advantageous sales coordination among cooperatives marketing different commodities will depend largely on how specific commodities are purchased in individual export markets. For cooperatives selling standardized commodities, such as grains, the trade uses established standards. At the other extreme, for cooperatives marketing branded products, issues such as proper market positioning, access to shelf space, advertising, and overall promotional strategy are of great importance.

Potential for coordination in sales is evaluated in greater detail for the subfunctions representation, promotion, pricing, and servicing.

Representation. Representation is the mechanism through which information flows between potential buyers and sellers. Those charged with sales representation play a major market information and intelligence role. The role includes monitoring marketing opportunities; competitive conditions; and individual customer needs, interests, and overall satisfaction. In some cases, foreign buyers deal directly with the U.S. office of a cooperative supplier. However, having representatives more easily accessible to foreign customers usually enhances sales potential. Foreign representation may be accomplished through commission agency arrangements, foreign distributorships, or overseas offices staffed by the cooperatives' own personnel. In indirect sales, brokers or export managers often handle representation.

Exporters without foreign representation may limit export sales efforts to responding to inquiries from abroad. They also may take a more aggressive approach, involving telexed and written inquiries to follow up leads provided by private

and government trade information services or contacts from participation in trade shows. Customers also may be drawn by advertising in domestic and foreign trade publications or the firm's reputation. Whether this turns out to be an acceptable means of doing business will depend largely on the amount of export business conducted, marketing objectives of the exporter, and interests of foreign customers.

Markets vary significantly in their organization and standard business procedures. Requirements for effective representation in a foreign market may be influenced by social norms and cultural values as much as by sales volume involved. Several cooperative leaders interviewed contrasted conditions in one country where a sale, regardless of size, requires continued personal contact with those in another country where all sales are handled mechanically and impersonally. Thus, representation must be tailored to particular practices in a given market. Before considering coordination potential in arrangements for foreign representation, one should evaluate costs and benefits of alternative forms of representation.

Export agents. Export agents generally work on a commission basis. This permits the exporter to gain access to foreign representation without locking in major fixed costs. Although some agents are paid a retainer or guarantee against commissions, the general advantage of a commission agent to exporters is that their costs are related to the amount sold through the agent.

Commissions vary substantially by commodity, size of sale, average annual sales volume, market structure, services performed, and what the market will bear. Interviews with cooperative managers indicated that some agents receive commissions that average less than 0.1 percent on substantial oilseed sales, while they may amount to 10 percent on small sales of specialty products. This comparison overstates the range of commissions in that the latter figure includes some domestic services associated with export marketing, while the former apparently reflects a fee for services only involved in the foreign end of the transaction.

As can be seen from table 3, agent commissions for exports of assorted processed fruits, nuts, and vegetables fall in the 2- to 4- percent range, while commissions on sales of bulk grains and oilseeds are generally 0.5 percent or less. The meaning of direct comparisons of commission rates is significantly obscured by differences in quality of service provided as well as services performed by an agent. An agent may or may not represent one exporter exclusively for each product handled. This is a matter to be agreed upon between exporter and agent. While many U.S. exporters talk about the importance of having agents who will not handle competitors' products, commitment to supply export agents on the same basis as domestic ones is not always as strong.

Table 3—Commission costs for export sales and representation, selected agricultural commodities.

Commodity	Representation commission costs	Total selling costs (including representation)
<i>Percent of total sales</i>		
Feed grains	0.15 to 0.5	
Rice	0.5	
Oilsseeds	0.06 to 0.2	
Citrus		1.5
Canned fruits and vegetables		4 to 4.5
Dried fruits	2.5	4
Nuts: wholesale/retail	2	4.5
Nuts: institutional	3 to 4	
Fresh citrus		5 to 10
Processed food products (sold through export management firm)		10

Source: Personal interviews conducted during this study. See appendix.

Overseas Offices. One alternative to the use of foreign country agents is to establish overseas offices staffed by the exporter's own personnel. This may permit increased attention to the exporter's products and provide better service to customers. It does, however, lock in major fixed costs, necessitating a significant sales volume. Table 4 presents estimates of the range of annual expenses in maintaining an overseas office. These expenses will vary markedly by office location, staffing, type of services provided, market area covered, and image the exporter seeks to project. For example, office rental in Tokyo would greatly exceed cost of a similar office in Algiers, and a regional office would be expected to have higher travel expenses than one serving a small market area. Nonetheless, these figures give some insight into costs involved in an overseas office and facilitate comparison between offices and agents in development of a representation strategy.

Evaluating Representation Alternatives. Several factors limit market coverage of a representative. These include: national boundaries, geographical accessibility, linguistic unity, physical size of an area and travel time, regional differences in taste or tradition, media coverage, established contacts of individual representatives, location of existing offices and facilities, and commodity organization of the importing country's marketing system.

These factors all influence the configuration of a representative network that will best serve the interests of an exporter or group of exporters. Evaluation of many of the qualitative trade-offs between agents and offices is difficult. Control

Table 4—Estimated annual overseas office expense

Expense Item	Costs ¹
Office:	Dollars
Rent	10,000 - 100,000
Furnishings (nonrecurrent cost)	30,000
Utilities	1,500
Telephone, telex, TWX and so forth	10,000 - 20,000
Miscellaneous supplies and services including janitorial and messenger services	5,000 - 15,000
Staff:	
U.S. Director	60,000 - 100,000 ²
Secretary	8,000 - 20,000
Bookkeeper	8,000 - 20,000
Travel and entertainment ³	
Total	100,000 - 300,000 +

¹Based on FAS estimates and data collected during interviews.

²Including base salary, fringe benefits, foreign taxes, and educational and housing allowances.

³Depends on type of operation and geographic coverage of office.

over a foreign office is greater than that over an agent, permitting the exporter to have greater influence over allocation of resources among different markets. At the same time, the foreign agent may have market-specific expertise that exporters can acquire for their foreign office only through experience over time or by hiring experienced personnel.

One major factor influencing the choice between agent and office will be expected changes in costs and sales that would result. Agents receiving a 2.5-percent commission for their foreign market activities would get \$100,000 a year for sales volume of \$4 million in the market they covered. This figure would make the exporter a substantial customer for many agents. On the other hand, it would pay for only the most limited foreign office in many areas of the world, especially if the office staff included a U.S. national.

In addition, broad product exposure requires representation in many markets, some with greater sales potential than others. A combination of offices and agents may be the most cost-effective method of representation.

If different commodities are sold through similar channels and purchased by the same people, a number of advantages to coordination may be identified. For the buyer, contact with a full-line supplier or agent may yield decreased transaction costs in satisfying procurement needs. For the supplier, the per-product cost of making a sales contact decreases as the number of products represented increases. Also, probability of making a sale that will cover costs of a

sales visit will increase as number of products handled increases. At some point, however, a salesman cannot maintain sufficient commodity expertise to be able to handle effectively an additional commodity. Determination of that point will vary according to the individual involved and commodities handled. When marketing a commodity is seasonal, diversification may reduce seasonal slack and lower per-unit sales costs.

One criticism of product diversification voiced by some cooperative representatives is that it will result in decreased marketing attention for the original set of commodities. While this is a legitimate concern, Diamond/Sunsweet (now part of Sun-Diamond Growers) found that in marketing both walnuts and prunes, commodities with somewhat staggered marketing seasons, fixed costs of marketing are shared and the combined organization has more personnel selling in more markets, with more sales contacts and more potential sales opportunities than could be supported by independent marketing organizations for each commodity.

Other cooperatives also have added members handling commodities with different seasonal marketing requirements. One citrus cooperative, Seald-Sweet, Inc., markets peaches and apples at the end of the citrus season. This permits employing personnel and facilities during a period of low citrus marketing activity.

In summary, there are opportunities for coordination of effort in representation. Benefits include both cost savings and service improvements. A disadvantage is diffusion of focus by representatives. Commodity-specific expertise must be maintained.

Promotion. Promotion is the means by which demand is developed or reinforced. Promotion can have the following effects: (1) influencing use of a commodity regardless of origin; (2) developing a demand for that commodity from a specific country, region, or other limited geographic area; and (3) affecting demand for individual brands or products from specific sources of supply.

For a marketer of a standardized bulk commodity, capturing the benefits of promotion is more difficult than for a marketer promoting a branded, processed product. Promotion of standardized commodities opens opportunities for the "free rider," a market participant who does not contribute to costs of promotion but who enjoys access to its benefits.

To cope with the "free rider" problem, promotion for U.S.-produced, standardized commodities abroad is often handled by trade associations, in cooperation with USDA Foreign Agricultural Service (FAS). FAS works with 54 such groups, referred to as "market development cooperators" in promoting demand for U.S.-produced commodities,

some traded as standardized commodities and others differentiated. Cooperators include such groups as U.S. Feedgrains Council, American Soybean Association, U.S. Wheat Associates, Northwest Horticultural Council, and others.

The objective of FAS Cooperator Program is to enhance demand for U.S.-produced commodities without promoting specific suppliers of those commodities. This is justified by the belief that export sales of U.S.-produced commodities will improve the balance of trade, increase income to agricultural producers, and benefit the overall domestic economy. The costs of these promotional programs are shared among U.S. agricultural producers, taxpayers, and foreign country cooperators, such as associations of millers and bakers, who also stand to gain from increased sales.

A number of mechanisms are used to promote export sales and to develop foreign markets, including participation in trade fairs, trade team visits to prospective foreign buyers, and advertising. Costs of participating in trade fairs, shows, and trade team visits may be reduced through joint representation. After participation in trade shows, follow-up contacts are essential to effectively develop foreign markets. Business contacts made outside formal programs of trade teams and trade shows are important. These events can serve as an opportunity to use foreign market representatives to arrange contacts with both potential and established customers.

Promotion through advertising is becoming increasingly important throughout the world. Advertising may decrease cost to the buyer of product information and may modify consumer tastes and preferences. Studies of advertising in the United States have found its maximum effectiveness is achieved only at certain saturation levels. Advertising has a cumulative impact, so each additional dollar spent may build upon earlier expenditures. Furthermore, large-volume advertisers often pay less per unit of time or area covered with advertising. Additional cost savings in advertising are obtainable through combination of complementary products in a single promotion. This opens up possibilities for cross-subsidization in introducing new products related to an already recognized line.

For cooperative exporters considering joint promotion, the issue of branding is quite important. Some joint endeavors maintain separate brands for individual commodities, such as Diamond Walnuts, Sunsweet prunes and Sunmaid raisins. Preservation of individual brands may limit breadth or number of commodities that can be promoted successfully through coordinated advertising. Many cooperatives have substantial goodwill invested in their own brands and would be reluctant to give them up for a joint arrangement. Nonetheless, coordination of promotional activities could carry significant advantages.

In a study of the food processing industry, Horst found economies of scale in advertising were obtainable at much larger sizes than required for efficient processing plant scale.²⁸ Coordination may be one means for exporters to attain the size necessary for achievement of economies of scale in promotion.

Pricing. The exporter's objective in pricing is to avoid needlessly giving away profit opportunities while remaining competitive. In developing a pricing strategy consistent with this goal, a number of issues must be dealt with. Sales can be made on a number of terms, free along side; (f.a.s.) free on board (f.o.b.); cost and freight (c. and f.); and cost, insurance, and freight (c.i.f.) are the most common. Each set of sales terms involves different marketing services and risks. A sale or contract can reflect a flat price or, for some commodities, a price in relation to a futures market quotation (basis pricing). In some cases, the actual price may be set at some later date. Furthermore, the currency of sale will affect final prices paid and received.

An export pricing strategy also must reflect domestic supply and demand conditions, competition in specific foreign markets, and procurement priorities of buyers in those markets. Marketers have to reflect constantly on the fact that their total revenue is a function of both price and quantity sold and that their profit depends on both total revenue and total costs. Therefore, both short- and long-term repercussions of decisions must be considered in developing a pricing strategy for exports.

It generally is accepted that the costs of gaining entry to a new market outlet are greater than those involved in retaining an established client. Thus, flexible pricing and cross-subsidization in allocation of overhead expenses are important tools in market development and retention.

Pricing strategy also will depend on competition in individual foreign markets and economic factors such as elasticities of demand (responsiveness of demand to price changes) and availability of substitute products and suppliers. In some foreign markets, U.S. exporters compete against each other and against state trading agencies and marketing boards with tremendous pricing flexibility in development and maintenance of market shares. In such cases, coordination among U.S. suppliers may offer opportunity to compete more effectively with such state traders.

Another pricing strategy consideration concerns procurement priorities of buyers. Buyers in some foreign markets

emphasize price over quality in their procurement practices. In other markets, quality and service considerations result in larger ranges over which price variations will not alter procurement decisions. Coordination among exporters can improve information on procurement priorities of individual foreign buyers, enhancing the effectiveness of marketing strategies.

Coordination among exporters also can permit greater precision in estimation of export marketing costs. Improved cost estimates can result in greater flexibility in pricing terms as well as a decrease in the risk premium necessary to cover pricing errors. Thus, access to a highly qualified information staff resulting from coordination with other cooperatives can improve pricing decisions.

Servicing. As export sales increase and new markets develop, the importance of service to sales can be expected to increase. Service to sales includes such activities as teaching foreign grain millers how to use U.S. wheat, foreign textile mills how to use U.S. cotton, and foreign food processors and consumers how to use U.S. fruits and nuts. Trade associations already are undertaking significant activities in this area as part of FAS Cooperator Programs. Costs of such services are shared by industries that benefit.

Another form of service is to provide in-country warehousing and distribution arrangements that will assure customers of rapid deliveries and avoidance of out-of-stock situations on branded, processed products. This type of wholesaling service can be arranged to serve several cooperative exporters. It could be supplemented with promotion assistance and collaborative efforts to design and package products to satisfy local regulations and customer preferences. On perishable products, sales services sometimes include on-site inspection of incoming shipments to insure quality and condition of products are consistent with the sales agreement.

Financing

The financial function includes paying and collecting accounts; financing inventories and receivables; handling foreign currency exchange; and various other activities such as checking foreign customer credit and arranging to pay for foreign offices, facilities, and employees.

Export sales can be made on a variety of payment terms. Firms must analyze trade-offs between risk and cost associated with payment terms on each sale. Inadequate information or analysis usually leads to unnecessarily restrictive credit terms. This may inhibit growth of exports as well as new market development. Ability to make sales in foreign currency also contributes to exporter flexibility. Exporters of a wide variety of commodities all face similar international financial requirements. This results in broad opportunities for coordination of financial arrangements.

²⁸Thomas Horst, *At Home Abroad: A Study of the Domestic and Foreign Operations of American Food-Processing Industry* (Cambridge, Mass: Ballinger Publishing Co., 1974) pp. 124-126.

Payment Terms. Payment for export shipments can be handled through letters of credit, sight or time drafts, cash against documents, open accounts, or consignment. These are listed in order of increasing risk to the exporter.

If payment is made through a letter of credit issued irrevocably by a bank in the buyer's country and confirmed by a U.S. bank, the seller assumes little risk. If shipment is made according to requirements of the letter of credit, the seller is assured of receiving payment upon presentation of necessary documents to its bank or to the confirming U.S. bank. The buyer is also protected, because payment will not be made without compliance with terms of the letter of credit. However, depending on the relationship between buyer and seller, requirement of an irrevocable letter of credit may be an unnecessary bother or expense.

A survey of financial requirements of cooperative exporters by the Bank for Cooperatives (BC) system concluded some cooperatives sell only on a letter-of-credit basis, because they are unable to evaluate adequately credit ratings of foreign customers and find this the simplest means to reduce risk of nonpayment. The study concluded that such terms limit overall potential export growth as well as growth in new markets.²⁹

If the exporter feels protection of a letter of credit is not required by commercial or political risks involved, it may agree to payment on a draft basis. An export draft is a financial document drawn by the seller that instructs the buyer to pay the amount of the draft on receipt (sight draft) or at an agreed-upon future date (time draft). Time drafts usually require payment 30, 60, 90, 120, or 180 days after presentation (sight) or after the date of the draft.

Most cooperative exporters have drafts collected through a U.S. bank. The exporter sends required documentation and collection instructions along with the draft to either its U.S. bank or directly to the collecting bank. On a sight draft, shipping documents are released to the foreign buyer or its bank upon payment. On a time draft, documents are released against acceptance of the draft by the importer.

Open-account transactions are arrangements between buyer and seller for payment at a specified future date. They are a simple method of payment with low bank costs and involvement. However, because no negotiable financial instrument is involved, legal procedures in obtaining payment of a dishonored open account transaction may be complicated. Export sales on open account generally involve trade with established customers in markets where political risks are minimal.

Among other payment terms, cash against documents, which Hirsch found common in indirect export sales, is essentially an informal sight draft, where the buyer or its bank pays upon receipt of documents.³⁰ Risks are somewhat greater than with an official financial document, but bank charges are reduced further.

Consignment sales involve an even greater degree of risk. These are quite common in European fresh produce markets, especially where exporters do not have the reputation for consistent quality standards. Some cooperatives, such as Sunkist, which have both the reputation for quality and the foreign quality control systems to protect it, almost never sell on consignment, even though their competitors from Israel and South Africa do so regularly.

There are trade-offs between banking service costs in collection of payment for export sales and risks in payment terms under which sales are made. The degree of trade-off involved is largely dependent on credit-worthiness of both supplier and foreign customer. Ability to assess risks involved is thus largely dependent on knowledge of specific foreign markets and access to information on credit ratings of firms that operate in them. Such information is essential to meaningful evaluation of costs and risks in collections and banking services for transactions involving different payment terms.

Foreign Credit Information. A cooperative manager is charged with the responsibility to obtain the highest possible average return to producer-members. If a sale is arranged at a high price, but the buyer defaults on payment, the sales prices becomes meaningless. Likewise, if a sale is not made to a credit-worthy customer because the cooperative manager is unable to evaluate the risks involved, a profit opportunity is needlessly foregone. The mere thought of far-away markets and potential collection difficulties may result in establishment of a strict policy of only making letter of credit export sales. Such a policy may not be in the best longer term interest of the cooperative exporter. Foreign credit information can be obtained and used to evaluate the appropriate terms for a specific export customer.

Financial information on prospective foreign customers may be obtained through experience, the exporter's foreign offices or agents, other traders, banks, and a number of government and private services. Government sources, such as U.S. Dept. of Agriculture and U.S. Dept. of Commerce, generally provide only limited information, such as bank references. Private services such as Dun and Bradstreet International and Chase World Information Corp.

²⁹Banks for Cooperatives *Report of the Banks for Cooperatives System Export Services Study Group* (Denver, 1976), pp. 10-11.

³⁰Donald E., Hirsch, *Agricultural Exports by Cooperatives*, Farmer Cooperative Research Report 5, (Washington, D.C.: U.S.D.A., 1979), p. 7.

provide financial data on international businesses and credit terms granted for shipment to various markets.³¹

Banks are a major source of foreign credit information for their customers. Their ability to obtain valid and useful information depends on their foreign subsidiaries or correspondent relationships with other banks in foreign countries. Their willingness to treat inquiries by a specific exporter as a high priority may depend on importance of the exporter as a customer. The same condition might apply to treatment of inquiries by an agent in a foreign market.

Some opportunities for potential coordination economies exist in obtaining credit information. With greater volume and a wider range of foreign customers, access to information through trade contacts increases, as does importance of an exporter to foreign agents. In addition, banks appear to be more responsive to larger customers, providing them preferential rates for both facilitating services and credit.

Credit. Advantages of size and good credit ratings in obtaining commercial credit are well documented. Commercial bank loans at the prime lending rate generally are reserved for "better" customers, while smaller customers pay more. Large size, name recognition, and good credit ratings also permit some cooperatives to issue commercial paper with high ratings, gaining them access to capital at 1 to 1.25 percent below the prime interest rate.

Many cooperatives use Banks for Cooperatives (BC) for credit to finance export-related inventories and domestic facilities. Cooperatives that deal almost exclusively with Banks for Cooperatives have sometimes encountered difficulty in obtaining satisfactory servicing of their export-related financial requirements by the commercial banking sector. A number of cooperatives maintain lines of credit with commercial banks to facilitate better service.

Passage of the Farm Credit Act Amendments of 1980 by the 96th Congress permits the BC system to expand its participation in financing international trade-related activities of U.S. cooperatives. In attempting to improve its ability to provide export-related financial services, the BC system has set up an international banking facility at the Central BC in Denver that will provide services to cooperatives through regional BCs. Services being offered initially include letters of credit, collections, bankers acceptances, foreign exchange, and international trade financing.

Foreign Exchange. Since August 1971, when the United States announced it would no longer accept foreign dollars

³¹Dun and Bradstreet, *Principal International Businesses*, (New York: Dun and Bradstreet International), *Chase Export Credit Reports*, (New York: Chase World Information Corporation).

for conversion into gold, commitment to exchange rate parities among major world currencies has been replaced by a system of managed but flexible exchange rates among currencies. This gives rise to foreign exchange risk, as the relative exchange value of the dollar fluctuates in the international currency market.

Ability to make export sales in foreign currencies may improve the competitive position of the U.S. exporter vis-a-vis other foreign suppliers. It also may permit cooperative exporters to increase returns to members through avoidance of unnecessary loss of profit opportunity.

Unless a foreign buyer happens to have dollars available through Eurodollar account balances or lines of credit in dollars at U.S. banks, currency exchange will have to occur at some point in an export transaction. Thus, the issue is not whether a price of U.S. commodities will have to be calculated in foreign currency terms, but rather when and by whom it will be calculated and how foreign exchange risks will be handled.

Potential Coordination Economies. Because of similarities in financial processes involved in sale of a wide range of commodities, financial system contacts and credit information sources will be useful to cooperatives exporting a variety of commodities. A foreign market presence for export of one commodity could serve usefully as a source of financial information and assistance for others. One reason many U.S. exporters hesitate to make export sales on less restrictive payment terms, such as open account or cash against documents, is that substantial costs and distances would be involved in resolution of any difficulties. While collections and credit information probably would not be sufficiently important by themselves to lead to establishment of a joint overseas office, these functions easily could be shared across commodity lines.

Speed of documentation flow is a critical factor in determining costs of financing export transactions. Increased speed may be achieved through better service from the banking system, use of courier service to deliver documents, better training for cooperative personnel, or other factors that might be achieved through joint action.

Coordinated efforts among cooperative exporters could lead to lower costs and better service from international departments of commercial banks.

Another possibility for reducing costs of financing exports may be in establishing a federated cooperative for foreign exchange transactions. Such an arrangement would permit cooperatives to share costs and specialized expertise of international financial market analysts and foreign currency traders. This would increase the flexibility of terms under

which cooperatives could offer commodities in export markets while providing some protection against exchange rate fluctuations.

Documentation

The average international shipment involves 46 separate documents.³² Documentation costs have been estimated at 7.5 percent of the value of total U.S. export and import shipments.³³ But this may not include costs of inventory financing when documents move less rapidly than shipments themselves. Hutchinson reports shipments of perishables arriving in Europe a full week before arrival of the documents required to clear customs.³⁴

Throughout the world, considerable variation exists in documentary requirements among importing countries and different commodities. Speed with which shipments and documents are handled also varies. Tests involving frozen poultry shipments found that the free port of Hong Kong required only 2 documents for customs clearance, while Italy required 10. Customs clearance of poultry shipments in those tests took from 2 to 6 hours in Germany to 2 to 3 days in Italy.³⁵

Potential economies of coordination may be achieved through increased speed of document flows and decreased costs of document preparation and processing. The latter may include benefits of specialization in preparation and processing and additional gains through consolidation of shipments. The documentation function, as the linking mechanism between product and payment, is an essential factor in determining net returns from export sales.

Speeding Documentation Flows. Many exporters use international freight forwarders to handle documentation. Freight forwarders often have networks of offices and con-

tacts between points of origin of goods and their destinations and are able to expedite documents. Freight forwarders also have resources for finding out which documents are required for an individual shipment.

Some cooperatives handle all aspects of documentation themselves. They type the export declaration and use courier services and foreign offices or agents to expedite documentary flows after the shipment is on board an ocean vessel and the bill of lading signed.

Time involved in flow of goods and documents can be decreased through knowledge and understanding of standard operating procedures of participants in the process and ability to make contact with and influence those participants. Banks are said to be more responsive to needs of their more important clients. Messenger services, foreign agents, and representatives can all be involved in checking on and speeding up the flow of documents.

Economies in documentation may be realized through increased volume. A messenger service carrying bills of lading from ship to bank or forwarder can easily combine several sets of documents in one trip at a far lower cost per document set than moving each individually. Freight forwarders recognize this fact and, in some ports, share messenger services. Where shippers share common use of a port or common foreign destination, there is potential for collaboration in arranging documentation services.

Other Savings in Documentation Costs. Additional cost savings can be achieved by reducing number of documentation forms and by consolidating shipments under a single set of documents.

A 1974 study estimated 19 export documents most frequently used for exports originating in the United States had an average preparation cost of \$94.52 and an average processing cost of \$281.25 for an average documentation cost of \$375.77 per shipment.³⁶ If these costs rose at the same rate as the Consumer Price Index, they would amount to almost \$663 in 1981.

Thirty-three additional documents can be required but are used less frequently and 43 special documents are used infrequently. Of the 33 less frequently used documents, 32 can be required for ocean shipments and 30 for air shipments. Cost of preparing and processing these documents is said to add as much as \$641.18 to ocean shipment costs or \$623.77 to costs of air shipment.³⁷ These figures could both exceed \$1,100 in 1981, if costs rose at the same rate as the Consumer Price Index.

³²Unz and Co., *The "How to" Guide for Importers and Exporters* (Jersey City, New Jersey, 1979), p. 10.

³³Committee on International Trade Documentation and U.S. Dept. of Transportation, *Paperwork or Profits in International Trade*, (New York, 1971).

³⁴T.Q. Hutchinson, L. A. Hoffman, and R. L. Parlett, *Improving the Export Distribution System for Fresh Fruits and Vegetables*, ERS Marketing Res. Rpt. 1027, (Washington, D.C.: USDA, 1974) p. 27.

³⁵Constantine J. Nicholas, and Philip L. Breakiron, *Intermodal Transport of Frozen Poultry Products to Overseas Markets - A Comparison of Physical Performance and Costs of Van Container and Break-bulk Systems*, ARS Marketing Research Report 1025, (Washington, D.C.: USDA, 1974), p. 14.

³⁶Hutchinson, op. cit.

³⁷T. Q. Hutchinson, op.cit.

Cost of preparing and processing documents can be decreased somewhat through changes in methods of preparation. A form entitled "U.S. Standard Master" makes it possible to produce 16 documents in a single typing, eliminating much repetitive transfer of the same data among forms.³⁸ Substitution of the Standard Master for nine most commonly used forms could save an estimated \$151.89 per shipment in preparation and processing costs. Further savings of \$185.54 per shipment were estimated to be possible through use of the Standard Master to replace 20 less frequently used documents.

Costs of documentation are similar regardless of shipment size. As a result, exporters who use similar ports and ship to similar destinations might be able to benefit from consolidation of shipments. In some places, exporters also will be able to save on documentation and other costs by making larger individual shipments and physically positioning inventories close to foreign markets.

Risk Management

The risk management function involves evaluating and balancing trade-offs between risks and costs of covering them. Risk management requires assessment of risks in individual transactions and impact of individual risk on overall risk exposure. Five types of risks associated with export transactions are physical, pricing, commercial, foreign exchange, and political.

Risk management is highly interdependent with all other export marketing functions. Many trade-offs involved in managing risks have surfaced in discussion of other functions. This section draws together individual risk elements in the export process and evaluates potential for either mitigating risks directly or decreasing cost of risk coverage through coordination and risk pooling.

A manager of a cooperative enterprise must make decisions that impose risk on those whose interests are being managed. While many risks can be covered by insurance, the cost at which this coverage can be obtained is often so great, either the activity must be foregone or exposure to risk only partially covered. In export marketing, costs imposed by both risk coverage and risk exposure contribute to the price at which products can profitably be offered for sale. Thus, a manager may have to accept a certain amount of risk to maintain a competitive position in commodity exporting.

Farmer cooperatives have been accused of being overly risk averse. Critics point out instances where cooperatives have withdrawn from export trade after a loss on a single transac-

tion, while it is believed that noncooperative firms would have continued in spite of the short-term setback. Such behavior by cooperatives may be explained in part by differences in responsibility bearing between cooperative and noncooperative enterprises. Cooperative activities are more open to public, and especially member, scrutiny than are those of many investor-oriented firms. Some cooperative managers interviewed felt they were vulnerable to replacement as the result of much smaller short-term losses than would be allowed by their noncooperative counterparts. This may encourage short-term management strategies that are not consistent with the longer term welfare of cooperative members. For example, avoidance of short-term risks in ocean freight markets for grains may result in exposure to greater risks in developing future market opportunities. If a large percentage of the total sales of a cooperative are to the limited number of foreign buyers willing to make ocean freight arrangements, the members may be exposed to considerable risks in the event that a single customer wishes to alter the arrangement or extract price concessions or if a single country breaks diplomatic relations, embargoes trade, or becomes involved in war.

One experienced manager suggested that a rule of thumb for market outlet diversification is that no more than 20 percent of sales should be made to a single outlet.

Physical Risk. Physical risk reflects probabilities of loss or damage to merchandise being sold. The most commonly recognized risk in international trade, it is usually covered by marine or cargo insurance. Marine insurance may cover many risks, among them loss; theft; pilferage; breakage; and damage from fire, fermentation, humidity, leakage, odors, sweat, taint, and/or vermin. The type of available coverage ranges from "all risks" coverage for physical loss or damage, but not that caused by war, riots, or strikes, to total loss of vessel. The latter is less expensive but covers only total loss of cargo resulting from total loss of a vessel.

Most export shipments are insured against some form of physical risk. If sales are made on a c.i.f. basis, the shipper makes arrangements for insurance. On other sales terms, such as f.o.b. and c.&f., the buyer is responsible for insurance arrangements. However, an exporter continuing to hold a financial interest in the merchandise being shipped has an interest in ensuring the shipment is protected.

Significant cost reductions are obtainable through insuring large sales volumes and large numbers of shipments. Marine insurance policies can cover a single shipment or all shipments made during a given time period. The latter coverage is less expensive. Freight forwarders often have open insurance policies that can cover shipments at a lower cost than obtainable through policies written on a single shipment basis.

³⁸Unz and Co., op.cit., p. 31.

Many cooperatives have their own or joint insurance companies that provide service to members and coverage for physical risks in domestic shipments. Gold Kist, Inc.—a cooperative with significant annual export sales in peanuts, soybeans and soybean products, poultry, and several other products—has a blanket marine insurance policy negotiated through its domestic insurance department. As a result of the large and diversified volume covered, Gold Kist has sometimes found it can provide insurance coverage for 50 percent or less of the cost at which prospective customers can obtain similar all-risk coverage. This improves its ability to be price competitive and to provide better service to customers.

Experience in exporting develops knowledge of probabilities of physical risks with individual ports, markets, or shipping companies. Many exporters find it advantageous to rely on freight forwarders to handle export transportation and insurance arrangements, because forwarders have access to such knowledge at a relatively low cost.

Obtaining knowledge of physical risk factors such as monitoring quality standards and preventing fraudulent loss claims can be enhanced through coordination among exporting cooperatives. In fresh fruit shipments, it was noted previously that large cooperatives such as Sunkist have sufficient volume to support costs of having a paid representative present during unloading of fruit from vessels. For smaller shippers, collaborative action may be the basis for economies in foreign inspection. For example, Citrus Shippers United has had arrangements for a paid representative to monitor arrival of fruit exported to Europe. CSU also has established a self-insurance program to cover fruit decay, permitting individual shippers to benefit from reduced costs obtainable through insuring large volumes. Additionally, because the program is set up as a mutual, any premiums not used to pay claims are distributed among shippers, providing an incentive to prevent decay problems.

Self insurance is often quite appealing as a means to cut costs of physical risk coverage. Greene estimates that, in general, insurer expenses amount to 30 to 40 percent of the total premiums collected.³⁹ Greene suggests that for successful self insurance, a firm must: (1) have sufficient numbers of objects to insure so they are not subject to simultaneous destruction and are sufficiently homogeneous in nature and value to permit accurate calculation of probable losses; (2) set aside a fund for large or unusual losses and/or use self insurance in conjunction with large deductibles in commercial insurance; (3) maintain accurate records to estimate expected losses; and (4) provide for careful administration and planning, including specialized personnel to handle investment of funds, payment of claims, inspec-

tions, loss prevention, recordkeeping, and other related duties. These are conditions that could be achieved through multicooperative coordination.

Pricing Risk. Pricing risk accompanies variation in price of the commodity being marketed as well as costs in marketing functions such as transportation. Pricing risk includes both exposure to losses and unrealized profit opportunities.

For a number of commodities, futures markets provide a means to mitigate some pricing risks of export sales. Many export sales involve basis pricing. Risk is still involved in basis pricing, even if the sale is hedged through futures markets, because price relationships between geographic points do not remain constant. Also, a variety of political and economic news events such as embargoes, rumors of a major transaction, or increased trading in a contract may alter price relationships before a sale can be hedged. On commodities for which there are no futures contracts to permit hedging, devices such as forward contracts or holding of inventories can decrease risk exposure somewhat. However, some risk is always borne as part of the marketing process.

In addition to pricing risks in the commodity being exported, there are significant risks in costs of ocean freight. According to an official in a large international grain company, risks in ocean freight rate fluctuations are even greater than those in commodity prices. Ocean freight risks can be partially hedged through vessel charters or ownership, but both require substantial sales volume, expertise, and capital.

Size and volume contribute to advantages in managing pricing risks. As the number of transactions increases, expected variance of returns decreases. Where size of transactions is large, as in the grain trade, sales volume over which risk is to be pooled must be quite large to gain any appreciable reduction of expected variance of returns. Caves suggests requirements for risk bearing may contribute to the need for major grain trading companies to be quite large.⁴⁰

Potential coordination advantages in managing price risks depend largely on similar export marketing requirements. Cooperatives exporting commodities traded in organized futures markets benefit from joint action through Farmer's Commodities and Illinois Commodity Futures Trading Cooperative. Cooperation in transportation, sales, and information functions can reduce risks through improved pricing accuracy.

Commercial Risk. Export-related commercial risks include both credit risk and risk in depending upon a limited number of market outlets.

³⁹Mark R. Greene, *Risk and Insurance*, Third edition, (Cincinnati: Southwestern Publishing Co., 1973), p. 85.

⁴⁰Richard E. Caves, op.cit., p. 115.

Commercial credit risk may be limited through payment terms under which a specific sale is made. Risks not limited by payment terms may be insured through commercial underwriters. Market knowledge and contacts are essential to evaluate and reduce commercial credit risks in individual transactions. This includes access to credit reports on potential foreign customers; ability to analyze them; and ability to follow up, if difficulties arise in receipt of payment.

Coverage for both commercial and political risks is available through Foreign Credit Insurance Association (FCIA), an association of more than 50 major private insurance companies. FCIA was set up in 1961 to insure U.S. exporters against credit losses, affording them competitive advantage over exporters in other nations. Under the FCIA program, normal commercial credit risks are covered by FCIA, while Export-Import Bank assumes liability for political risks.

Most agricultural exports are insured under a short-term policy, with payment expected within 180 days. FCIA generally requires all short-term receivables be covered except those where an irrevocable letter of credit has been issued or where sales are to buyers in Canada. In some cases, a reasonable geographic spread of receivables will be covered instead of total volume. On short-term policies, FCIA will cover up to 95 percent of political risk and 90 percent or less of commercial risk involved.

Exporters can elect FCIA protection against both commercial and political risks or political risks only. Cost of coverage under a blanket short-term policy ranges from 25 to 50 cents per \$100 of gross value. One cooperative manager found this cost prohibitive, given low margins on many agricultural exports sales and requirements that the entire turnover be insured, not just exports to selected markets.

In addition to collaboration in analysis of credit data, cooperatives may be able to coordinate commercial credit insurance. If sufficient volume and market diversification can be obtained, it may be possible to satisfy FCIA requirements for geographical spread of risks without necessitating coverage of all export markets.

USDA's Commodity Credit Corporation (CCC) Export Credit Guarantee Program (GSM-102) is designed to expand U.S. agricultural exports by stimulating private financing on credit terms of up to three years.⁴¹ The guarantee coverage is provided to the exporter of the commodity who may assign the coverage to a U.S. financial institution that finances the export sale. The financing must be secured by an irrevocable letter of credit opened by the

foreign buyer's bank in favor of the exporter. Thus, the GSM-102 coverage protects the exporter or the financial institution against nonpayment by the foreign bank for commercial or noncommercial reasons without distinction. Generally, the program provides for coverage on 98 percent of the U.S. port value of the commodity exported plus 8 percent interest per annum. Cost of the coverage runs about 1/3 of 1 percent per annum on the unpaid balance of the transaction financed. Any agricultural commodity whose export furthers CCC's long-range market development objectives may be considered.

Other commercial risks accrue to the customer who seeks guarantees that exporters can and will deliver products or services as agreed when they submitted bids. This risk is increasingly covered by requirements of Bid/Performance Bonds. These bonds usually take the form of letters of credit for 2 to 15 percent of the value of the commodity to be exported. This can pose a financial burden for even financially viable and scrupulous exporters. Small exporters sometimes are required to post 100 percent, noninterest-bearing cash collateral with the bank issuing the bond.⁴² The cost of providing a bid/performance bond may range from 2 to 10 percent of the value of the bond, depending on reliability and experience of the exporter.⁴³

Foreign Exchange Risk. Foreign exchange risk includes variability in the rate of exchange among currencies and potential for significant profits and losses that result. As was noted previously, foreign exchange risks cross all commodity lines and provide potentially significant opportunities for coordination among cooperative exporters.

Political Risk. A number of politically related factors may affect ability of an exporter to collect payment for its commodities. These include currency inconvertibility or exchange transfer delay; war or other hostilities; expropriation; confiscation; import restrictions; regulations; and governmental actions, such as unforeseen withdrawal or nonrenewal of licenses to export or import. These are referred to as political or noncommercial risks.

Exporters of agricultural commodities may obtain coverage for political risks through FCIA, or under CCC's Export Credit Guarantee Program, discussed above.

Potential for economies in dealing with political risks are similar to that associated with other types of risk. Informa-

⁴¹U.S. Department of Agriculture, *CCC Export Credit Guarantee Program GSM-102*, (Washington, D.C.: USDA, February 1981).

⁴²U.S. Department of Agriculture, "Bid/Performance Bonds: How They Affect the Small Exporter" *Foreign Agriculture* (Washington, D.C.: USDA), January 1, 1979, p. 5.

⁴³Alan Krob, "Grain Importers Seek Steady Prices, Supplies" *Farmland News*, (February 15, 1979).

tion is essential in evaluating probability of political risks, and market diversification is important in limiting exposure to such risks.

Regulation

The regulatory function involves both complying with rules governing flow of goods in international trade and attempting to modify those rules.

Two groups of regulations affect the flow of goods in international trade: (1) tariffs and quotas, subsidies, and the other nontariff barriers; and (2) health and safety standards, labeling requirements, quarantines, and other regulations on chemical residues, food additives, etc. In some cases, regulations falling into the second group actually may function as nontariff barriers, while in others there is a bona fide health and safety objective.

Regulatory Information and Compliance. Regulations are imposed on market participants by governments, social custom, and other market participants. For the exporter, compliance with regulations in foreign markets begins as an information problem. It is necessary to determine whether a product now available for export can be sold in a given market. This involves identification of restrictions on food additives, chemical residues, labeling requirements, and other factors which may affect admissibility of the product. Some of this information is published by USDA, foreign country embassies, consulates, trade offices, and other sources.⁴⁴ FAS attempts to keep abreast of foreign regulations affecting use of pesticides and food additives, as well as labeling requirements.

For a number of years, FAS has offered a Label Clearance Program to assist U.S. exporters in determining if their product labels and ingredients as described on those labels, comply with specific country import regulations. About 850 labels are processed annually. The cost for this service is \$25.00 per label per country.

Information on tariff and nontariff barriers that may affect the competitive position of an exporter's goods in a foreign market is available from similar sources, as well as agricultural attaché offices and foreign governments.

The information and compliance process is complicated by the dynamic nature of regulation. Foreign governments may revoke or modify registration of certain chemicals or additives for use on or in specific commodities. Thus, the

exporter must keep abreast of regulatory changes that may affect future market opportunities.

Monitoring regulatory proposals can result in significant economies that may affect a number of different agricultural products. A common agency regulating all agricultural commodities would offer the opportunity for broad-based coordination. However, to be useful, regulatory monitoring must be accompanied by an analytical capability for assessing potential impact of proposed regulatory changes. Through such evaluation, costs and benefits of possible action to influence foreign regulatory processes can be appraised.

Influencing the Regulatory Environment. Modifying trade regulations has the characteristics of "joint-impact goods." This introduces the opportunity for free rider problems. Hence, if a group of exporters jointly finances a program to alter foreign regulations, nonmember competitors may be able to take advantage of the rule change without sharing costs involved. If a fear of this situation prevents action from being taken, the welfare of all exporters is adversely affected. Coordinated arrangements, in which most of those affected by potential rule changes share costs, can avoid this problem. Often, impacts of rule changes are not limited to single commodities. Multicommodity, broad-based coalitions might be necessary on specific issues. Groups such as trade associations and FAS cooperators can help coordinate actions by exporters.

Potential for exporters to influence their regulatory environment as well as possibilities for coordination among exporters are illustrated through two recent cases. One case involved actions by Northwest Fruit Exporters to influence quotas and fumigation standards for exports of fresh cherries to Japan. The second case involved efforts of Diamond/Sunsweet (now part of Sun-Diamond Growers of California) attempting to influence tariffs and nontariff barriers affecting U.S. exports of walnuts to the European Community.

The Cherry Case. Before 1978, cherry growers in the Northwestern United States were barred from exporting fresh cherries to Japan by a prohibition on importation of any agricultural commodity that might carry codling moth. A number of northwest shippers were convinced that through effective fumigation, they could export codling moth-free cherries. They established a Webb-Pomerene association, Northwest Fruit Exporters, which negotiated with the Japanese government and was successful in demonstrating the effectiveness of fumigation to eliminate risk of introducing codling moth into Japan on fresh cherries. Since exports have been initiated, NFE has continued to conduct tests and to negotiate in an effort to demonstrate that fumigation can be effective in eliminating codling

⁴⁴For an example see Commission of the European Community, *Exporting to the European Community: Information for Foreign Exporters* (Brussels: European Community, 1977).

moth without requiring fruit flesh temperature be at least 70 degrees, as now required by Japanese inspectors. Success in this effort would permit improving quality and prolonging sales life of exported fresh cherries.

The NFE experience indicates the potential for coordinated effort to bring about changes in health and safety standards that regulate sale of U.S. agricultural products in foreign markets. NFE does not include all cherry shippers in the Northwest. However, opportunities for free riders have been limited by recognition of NFE by the Japanese government as exclusive marketer for the industry. Shippers who did not initially participate in NFE are permitted to join, but with reduced quotas in the total NFE marketing program.

The Walnut Case. After a large harvest of small walnuts in France during 1978, U.S. walnut exporters were able to increase their sales of larger walnuts in West Germany. Faced with large inventories of small walnuts, the French growers called on other members of the European Community to establish licensing requirements for imports, minimum import prices, and the right to stop imports if necessary to safeguard European producers of walnuts, almonds, and hazelnuts (filberts). For members of Diamond/Sunsweet, a growers' cooperative marketing association (now part of Sun Diamond Growers of California), sales of Diamond walnuts to the nine members of the European Community and Greece, Spain, and Portugal, amounted to 80 percent of walnut exports during 1978-79. Loss of these sales, valued at almost \$20 million, would have had devastating, longer term effects on the Diamond/Sunsweet marketing program. The Diamond/Sunsweet reaction was swift. Representatives of the Diamond/Sunsweet international marketing department contacted U.S. agricultural attachés in Europe to enlist their support. Recognizing the importance of the move to all U.S. walnut producers, Diamond/Sunsweet's president and other representatives of the Walnut Marketing Board met with the EC Commission and key representatives of Belgium, the Netherlands, England, and West Germany in an effort to counter the proposal.

While this issue has not been finally resolved, several important implications can be identified. First, for the exporter to have access to information on changes and proposals for change in foreign market regulations is critical. Second, ability to influence the process of regulation must also be considered. In the walnut case, the market and industry involved were large enough to justify investment in contesting proposed rule changes. Additionally, involvement of the Walnut Marketing Board, representing walnut production in California, Oregon, and Washington amounted to de facto horizontal coordination. This avoided free-rider problems in that the board is financed by all walnut producers, not just cooperative members.

To further consider reasons why those contacted by Diamond/Sunsweet and the Walnut Marketing Board should respond to their declaration of interest is important. The U.S. walnut industry can hardly be considered an important constituent of the EC Commission or ministries of agriculture in EC member countries. However, the United States is an important trading partner for EC. Importance of organized opposition by U.S. walnut growers to the French proposal is based largely on importance of the U.S. market for European exports. If organized U.S. walnut growers have clout within the U.S. domestic political system, they may constitute a threat to European exporters to the United States in terms of their ability to stimulate retaliation. In this respect, U.S. walnut growers are important to the EC Commission and may be listened to.

CONCLUSIONS

Rigors of the export business are such that many farmer cooperatives can only develop successful export marketing programs by coordinating their efforts with other cooperatives or by operating through joint ventures with non-cooperative businesses. This study has identified several promising coordination options. These range from multicooperative collaboration in performing a single export marketing function to full participation in a joint export sales organization.

This section of the report draws together conclusions regarding: (1) an approach a cooperative can adopt in evaluating export marketing objectives and a basic strategy for coordinating domestic and export marketing activities, (2) relative merits of six organizational arrangements through which cooperatives can collaborate in developing stronger export marketing programs, and (3) economic opportunities for multicooperative coordination within each of the nine functional components of the export process. An agenda for further analysis and action in the more promising areas where cooperatives can effectively join their efforts to expand exports is suggested.

Marketing Objectives and Strategies

A cooperative's decisions on export marketing should be made in light of broader marketing goals. A necessary first step is to assess overall marketing objectives and capabilities. Such an assessment should identify one of the following roles as the most appropriate for a particular cooperative:

- Export market developer,
- Sporadic exporter,
- Surplus exporter, or
- Passive export supplier.

Success in developing export markets requires a sustained, long-term effort involving a highly skilled professional staff and sufficient sales volume to achieve low per-unit marketing costs. A cooperative with the interest to aggressively develop exports should have sufficient capacity to spread fixed exporting costs over a large volume. This will make the cooperative a potential prime contributor to a joint exporting arrangement and serve as an incentive for its becoming a motivating or organizing force in developing a coordinated export-marketing arrangement.

A cooperative that views itself as a potential sporadic exporter may also benefit from encouraging development of multicooperative arrangements. Fixed costs of establishing and maintaining an export marketing system can then be shared. However, the sporadic exporter will face some competitive disadvantages from being in and out of foreign markets. Irregular volume will also affect the value of a potential participant to other participants in a joint arrangement. To the extent that complementary requirements for export marketing services exist among sporadic exporters, there will be opportunities to achieve economies through joint arrangements. Additionally, some regular and sporadic exporters will be able to develop complementary arrangements in which sales volume of the sporadic exporter will contribute to defray fixed costs of exporting without interfering with quality of service available to the regular exporter.

Objectives of cooperatives interested in disposing of commodity surplus or serving as passive export suppliers will limit their potential contribution to multicooperative organizations and the range of benefits they can achieve. Nonetheless, such participation can offer opportunity to gain experience and confidence in international trade before making major commitments to export market development.

Joint export arrangements can be established to accommodate different levels of participation and equity investments to provide all participants with access to foreign markets at their desired level of service. Needs of some "sporadic exporters," "surplus disposers," and "passive export suppliers" may be adequately met by export-management firms, brokers, and others involved in commercial provision of export marketing services.

Types of Coordination Options. Another necessary step in identifying collaborative opportunities is to consider type of coordination to be emphasized. This is critical to identification of potential participants. Some examples of the primary interests of a cooperative or group are to:

- Solve a specific export marketing problem;
- Join a larger supply of the same or closely related commodities;

- Expand the range of foreign markets for a commodity or group of commodities;
- Extend the line of related products handled in a foreign market;
- Improve the harmonization of successive stages in the marketing process; and
- Put together a wide variety of commodities and products, all handled by American cooperatives.

Each of the above could lead to different combinations of cooperatives and commodities performing different functions under different organizational arrangements. This study was not directed at identifying the best or most feasible option for joint exporting for a specific group of cooperatives or commodities. Rather, some general principles have been discussed. Determination of the most appropriate alternatives for specific cooperatives will require detailed feasibility analysis.

Commodity Combination Priorities. Cooperatives can achieve significant initial gains in export marketing by combining commodities that (1) pass through similar marketing channels, (2) have similar handling requirements, or (3) have similar geographic origins or destinations. Significant economies of scale exist in the functions of sales, market information, transportation, financial arrangements, documentation, and regulatory compliance.

To assess the potential for coordination by commodity groups, distinguish between two major commodity groups: (1) undifferentiated bulk commodities and (2) differentiated or branded products. Also consider some further subdivisions, based on different handling requirements and size of sales. For example, dry bulk commodities such as grains and soybeans generally are shipped separately from bulk liquids such as oils. Also, fresh fruits and vegetables are handled and marketed differently from canned, dried, and frozen products. This latter distinction is so great some cooperatives have separate marketing divisions handling fresh and processed forms of the same commodities.

The range of commodities over which some export marketing activities can be combined is broad. Nevertheless, over the next 5 to 10 years, practical difficulties can be expected to limit the variety of commodities for which cooperatives will coordinate export marketing activities. Constraints on ability of managers to successfully organize and control extremely broad-based groups of cooperatives with divergent interests can be expected to inhibit development of an all-inclusive multicommodity cooperative exporting arrangement. Such arrangements would be difficult to organize without prior development of successful collaborative ven-

tures within each commodity area identified above. In the short- and medium-term, this implies, in most cases, greatest benefits to cooperatives can be achieved through development of separate coordination efforts for dry bulk commodities and differentiated or branded products. While collaborative endeavors are underway within each commodity grouping, substantial opportunities exist to broaden scope and improve performance of export coordination.

Export Volume, Similarity of Interest, and Coordination Potential.

Individual cooperatives can begin to assess coordination opportunities by identifying their own overall marketing objectives, volume, and experience. Once identified, this information can serve as the basis for evaluating opportunities offered by functional economies in exporting and various organizational options for taking advantage of them.

An examination of the experience of cooperatives in joint arrangements indicates those that were dissolved often involved cooperatives with significant differences in sales volumes. Where arrangements involved a relatively equal sharing of decisionmaking power among cooperatives with markedly differing sales volumes, the tendency toward dissolution appears particularly strong. Some managers of such arrangements indicated that the complexity of the educational task of dealing with an additional board of directors outweighed marketing economies achieved from the increment in sales volume accompanying an additional participant.

One alternative to such control problems has been development of a "fee for service" provision in operation of a joint exporting arrangement. In such an arrangement, smaller cooperatives trade off certain control prerogatives for access to economies of size in export marketing. Apparently, some loss of autonomy may be required where smaller cooperatives seek to retain their identities, while gaining access to more efficient means to market member production.

The importance of similar export volumes among participants varies depending on the commodities exported and the export functions being considered. A cooperative handling container-load export shipments of processed fruits faces significantly different transportation problems from a grain exporter chartering ocean vessels. Nonetheless, both may face similar problems in trading in foreign currencies and in increasing speed of documentation flows.

Organizational Options for Cooperative Exporters

Six basic organizational arrangements for coordinating multicooperative exporting were evaluated in this study. Significant advantages can be achieved through cooperative export management arrangements, multicommunity federated

export cooperatives, joint ventures, and Webb-Pomerene associations.

In cooperative export management arrangements, a lead cooperative maintains control over a joint-export organization, while providing export services on a fee basis. Where participating cooperatives handle markedly different sales volumes, a CEM arrangement is one means of inducing a large and successful cooperative exporter to enter into a joint marketing endeavor.

Multicommodity federated export cooperatives provide an opportunity for cooperatives to participate with co-equal status in decisionmaking concerning export marketing objectives and strategies. The MFEC may take the form of a joint export marketing agency handling a greater share of production of a particular commodity or providing a broader product line. Alternatively, it may be restricted to particular marketing functions, such as transportation, distribution, sales, or foreign exchange trading. Many regional and interregional cooperatives are involved in similar activities in domestic markets. In the short- and medium-term, advantageous export coordination opportunities through MFEC arrangements are likely to be based on similarities in marketing functions and geographic location of demand and supply.

Joint ventures offer opportunities both for cooperatives and for cooperative-noncooperative partnerships in export marketing. The potential here is similar to that of an MFEC. Joint ventures may involve combination of cooperative product origination capacity with corporate export marketing systems or joint development of export marketing systems. Complementarity of objectives in cooperative-noncooperative ventures must be given particularly careful scrutiny to assure it is consistent with overall marketing objectives of the cooperative and its members. Also, antitrust protection under the Capper-Volstead Act is not available to cooperative-noncooperative joint ventures.

Webb-Pomerene associations are another mechanism for collaboration in exporting, which may include cooperative and noncooperative participants. Under certain conditions, the Webb-Pomerene Act provides explicit antitrust protection for collaboration in export sales. As such, it may usefully complement any of the above organizational forms and the immunities of the Capper-Volstead Act. Webb-Pomerene has been used (1) to establish joint export sales agencies, (2) to permit smaller exporters to put together the product volume necessary to bid on large sales, (3) to improve the bargaining advantages of shippers in obtaining lower ocean freight rates, (4) to influence foreign country regulations on U.S. exports, and (5) for other purposes. It is also a mechanism through which groups of U.S. exporters can improve their competitive positions in dealing with state

traders and in avoiding cut-throat competition among themselves.

Two organizational options that offer limited potential to cooperative exporters are a Cooperative Trade Information Service (CTIS) and a Cooperative Brokerage Organization (CBO). One appeal of both the CTIS and CBO is that they can be a means to bring cooperatives into contact with each other while requiring minimal commitments by participants. Such a lack of commitment also would be a major limiting factor of these alternatives relative to the other organizational options considered.

For a CTIS to be of value, it would have to provide better and/or lower cost market information and intelligence to cooperative exporters than currently obtainable from other sources. However, acquisition and validation of market intelligence, in most cases, requires a trading presence in a given market. Without linkages between market information and sales functions, the value of a CTIS would be very limited. A more viable alternative for cooperatives wishing to monitor foreign market conditions without a major commitment to exporting would be use of a joint venture or MFEC to gain access to market intelligence collected by an active export marketer.

The potential contribution of a cooperative brokerage organization is similarly limited. Substantial numbers of brokers are already trading all agricultural commodities. A brokerage organization that restricted its sources of supply to farmer cooperatives would be entering a highly competitive business at a disadvantage.

Functional Coordination Potential

A broad understanding of the export process is essential if cooperative boards of directors and professional staffs are to make sound decisions on export marketing arrangements. This report divided the export marketing process into nine interrelated functions. These generally parallel domestic marketing procedures, although greater risks and more complex organizational arrangements often are involved. The nine component functions of the exporting process are (1) procurement, (2) processing, (3) transportation and physical distribution, (4) market information, (5) sales, (6) financing, (7) documentation, (8) risk management, and (9) regulation.

Similarities in export marketing requirements for different commodities and cooperatives open up many opportunities to achieve economies and profitably expand export sales. Where economies in a single export marketing function increase with sales volume over an extended range, setting up a collaborative arrangement based on that function alone may have advantages. If so, it is essential to evaluate the

ability of each participant to satisfy his or her overall export marketing requirements. Economies obtainable through coordinated arrangements to perform one function may not be realized if other functions cannot be performed effectively and efficiently.

In evaluating the procurement function, significant differences were identified in product commitment among cooperatives handling different commodities. Members of cooperatives handling grains and oilseeds often consider their cooperatives as only one alternative product outlet among many. Producers of more perishable fruits, nuts, vegetables, poultry, and dairy products are more likely to have exclusive agency arrangements with their cooperatives. This latter approach provides marketers with greater marketing flexibility due to an assurance of supply. But this also often imposes an obligation to market all that is produced. Differences in procurement practices influence the marketing task and objectives of cooperatives handling different commodities. This will influence coordination potential in export marketing. Another important procurement consideration is the basis for setting prices at which products are transferred between participants and a joint export marketing organization. Any collaborative export sales arrangement must either establish uniform transfer pricing practices or develop alternatives to the comparison of margins as a yardstick to its performance.

Similarities in processing-facility requirements open opportunities for horizontal or product extension coordination among exporters. Port elevators can handle a wide range of grains and oilseeds. Canning and freezing facilities can handle diverse fruits and vegetables. The objective of processing may be to standardize or differentiate the product. Marketing strategies for standardized products may be expected to require larger volumes and yield lower margins than strategies for differentiated products. Additionally, product differentiation, designed to respond to tastes or regulations in specific foreign markets, will sometimes restrict sales flexibility. This increases the importance of sustained market-development activity in exporting differentiated products. Coordination among exporters can aid in identifying and responding to tastes and regulations in specific foreign markets.

In transportation and physical distribution, significant economies are obtainable through collaboration among exporters at three levels: (1) chartering ocean vessels; (2) sending regular, large-volume general cargo shipments, whether break-bulk or containerized; and (3) consolidating small, less-than-container-load shipments, when assembly costs do not outweigh overall transportation savings. Rate or cost reductions also may be achieved by regular, large-volume domestic shipments. Coordinated advantages in transportation and distribution may arise from similarities in

origin and destination of domestic as well as international movement of the commodity, and in use of common transportation-related services. Also, the bargaining position of shippers is enhanced through joint action. The range of potential benefits of coordination in transportation is limited by differences in objectives and requirements of shippers of bulk commodities and those shipping general cargo. Additionally, needs of shippers handling large and small volumes differ significantly.

Economies in performance of the market information function may be achieved through spreading fixed costs over more transactions and volume and maintaining a regular trading presence in foreign markets. Single-source, single-commodity exporters have an information cost disadvantage compared with multicommodity, multinational trading companies. Economies of scale in gathering information will vary by commodity depending on product complementarity and the market channels utilized. Economies of scale in gathering information also depend on the exporting objectives of cooperatives and their need for broad-based market knowledge or specific market intelligence.

Benefits of coordination in performing the sales function must be evaluated in four areas: representation, promotion, pricing, and servicing. Coordination in foreign representation may take the form of common use of agents, representatives, or joint offices overseas. In each case, importance of an exporter to a foreign representative will affect quality of service obtainable as well as per-unit cost of export market representation. Collaboration among cooperatives in export representation offers opportunity to expand and diversify export market exposure and to become part of a more important clientele group in individual markets. These advantages will be restricted due to different purchaser needs in industrial, institutional, and retail markets.

Promotional economies will be limited primarily to commodity groups that utilize similar promotional media, industry contacts, or sales outlets. Substantial economies in coordination of promotion among complementary products may be realized. Development of "full-line" cooperative suppliers would best reflect organization of sales and procurement in individual foreign markets to achieve maximum promotional economies.

Improved market knowledge and intelligence on foreign market conditions and competitive suppliers can contribute to increased pricing accuracy, avoiding unnecessary loss of sales or "giving away" of profit opportunities. They also can reduce pricing risks in development of a pricing strategy.

Sales servicing can be improved through coordination of exports. Improved servicing includes greater flexibility in physical positioning of inventories, increased ability to pro-

vide special packaging and processing for individual markets, more effective quality control, and greater flexibility in delivery and payment terms.

Potential benefits of sales coordination among cooperatives marketing different commodities will depend largely on organization of buyers in individual markets. Exporting to some state trading nations may be improved by collaboration over a broad range of agricultural commodities. In other countries, organization of buyers will be conducive to more limited sales coordination. In all cases, however, commodity-specific expertise is essential to successful performance of the sales function.

Coordination potential in performing the financial function crosses all commodity lines. Evaluating risks and costs in alternative payment terms requires access to credit information on foreign markets and specific foreign firms. Such information is available from commodity-specific trade sources and foreign banking institutions. The Banks for Cooperatives are increasing their ability to assist cooperatives with export-related financial services. Additionally, some cooperatives could benefit from coordinated access to foreign currency exchange information and trading capacity. These factors would increase flexibility in trade terms offered by exporting cooperatives.

Coordination among cooperative exporters in preparation and processing of documents also can decrease costs and improve service. Through increasing speed of documentary flows, costs of financing inventories and receivables can be decreased while improving service to customers abroad. In coordinating documentation, the range of commodity interests involved will be less important than the range of geographic contacts and expertise involved.

A number of opportunities exist for joint action in the risk management area. Exporters must deal with five types of risk: physical, pricing, commercial, foreign exchange, and political. While each can be at least partially covered through commercial or public sources of insurance, costs and terms of coverage are not always compatible with necessities of competitive pricing. Similar risk exposures can be combined, in some cases, to achieve lower cost coverage. In dealing with physical risk, possibilities for joint "self-insurance" arrangements should be explored. However, current volumes of cooperative exports probably would be more conducive to use of self insurance in conjunction with a large deductible on commercial insurance rather than internal provision of all-risk maritime insurance coverage by a cooperative insurer. Joint negotiation of blanket coverage by commercial insurers can reduce rates for physical risk coverage. Where sizes and types of physical risk exposure differ markedly, as between shipload quantities of bulk commodities and single-container shipments of packaged pro-

ducts, similarity of interest conducive to joint insurance will be difficult to realize.

Pricing risk exposure includes commodity procurement price risk and associated marketing and transportation cost risks. Procurement price risks to the cooperative can be limited through pooling arrangements. However, some short-term risk is shifted to the producer in the process. In this case, short-term price risks may be more than offset by longer term risk reduction. Ocean freight cost risks have long been avoided through f.a.s. and f.o.b. sales. This limits the range of potential buyers to those willing to bear freight cost risks and transfers commercial risks to sellers. Ocean freight cost risk is greatest in shipping bulk commodities. Major grain companies and other shippers attempt to reduce risk exposure in ocean freight through chartering and vessel ownership.

Commercial risks include credit risks in receipt of payment of individual export transactions and exposure of exporters who rely on a limited number of market outlets. Coordination can reduce costs and improve assessment of credit risks for a broad range of exporters.

Foreign exchange risks are an area with potential for wide-ranging collaboration among cooperative exporters, regardless of commodities handled.

Assessment and coverage of political risks also is an area with far-reaching potential for collaboration. Cooperatives often are hesitant to export to many countries due to political risks involved. The Foreign Credit Insurance Association (FCIA) will provide coverage for political risks. Because of the FCIA requirement that an exporter either cover all shipments or a balanced portfolio, coordination among cooperatives could permit development of economies in insurance of political risks.

Significant benefits can be obtained through coordination in the regulatory function, especially in complying with foreign market regulations, evaluating impact of changes in regulations, and attempting to influence domestic and foreign regulations. Because it is difficult for a single exporter to capture benefits of rule changes without a significant market share, broad-based coordination among potentially affected exporters can be justified as a means to avoid "free-rider" problems. In some cases, this may require joint action through general trade, commodity, or farm organizations or public action in the interest of the general U.S. welfare.

An Agenda for Action

It is hoped that management, boards of directors for cooperatives, and others with interests in export marketing will use this report in further developing a sense of perspective on their objectives and opportunities in strengthening exporting operations.

This study has identified numerous opportunities for cooperatives to gain advantages resulting from size or sales volume through joint export marketing arrangements. Six organizational options have been evaluated as a means for cooperatives to obtain access to such advantages. Nine functional components of the export marketing process have been identified, and potential opportunities to achieve economies in their performance discussed. Results of the study have contributed to identification of areas where additional understanding could improve ability of cooperatives to develop profitable export marketing programs. Three areas where further study is suggested include:

- 1) Feasibility studies on specific combinations of commodities and/or cooperatives in exporting,
- 2) Studies of the economics of selected export marketing functions that are more narrowly focused on specific commodity subgroups and specific regions of the world, and
- 3) Further study of organizational structure of specific foreign market areas.

Feasibility studies should be conducted for specific groups of cooperatives. Selection of cooperatives to participate should be based on their objectives, export capabilities, and requirements of a particular collaborative effort. Such studies may consider feasibility of fully coordinated export sales arrangements or joint performance of individual export-related functions.

In development of more narrowly focused research within specific functional areas, it would be useful to consider a number of interesting and important issues related to product commitment; branding, transportation, and physical distribution; foreign market information; and sales.

Product procurement arrangements such as pooling often are thought to result in merchandising flexibility that can be translated into higher average prices for cooperative owner-members. Some cooperative leaders disagree. Nevertheless, this study and a number of others have identified product commitment as a significant issue in domestic and export marketing. Additional analysis would be useful. It has been noted that pooling is much less popular among bulk grain and soybean producers than among producers of fruits, nuts, and vegetables. Success of some rice cooperatives in obtaining member product commitment while providing producers with a range of pricing alternatives merits further study as an option for grain cooperatives.

An additional procurement-related topic that should be investigated is competitive reaction of noncooperative

handlers to establishment of cooperative pooling programs and other marketing agreements, particularly in the grains area. This may provide some insights into constraints facing cooperatives as they attempt to develop innovative marketing strategies.

Additional study of the impact of branding of processed products on export marketing economies could be quite useful. Some joint-venture participants export products under several different brand names. Some economies could be expected to be achieved through development of a common export brand or set of brands for use by collaborating cooperatives. Significant complicating factors appear to inhibit development of joint branding arrangements. Studies could focus on analysis of potential economies in joint branding and promotion in selected markets and how to overcome organizational impediments to such activity.

Rising energy costs can be expected to have significant impacts on international transportation and distribution costs. This will influence the competitive position of U.S. agricultural products abroad. Ship chartering, consolidation of shipments, and joint warehousing arrangements all merit further study of their impact on comparative advantage and development of sales in specific foreign market areas.

In evaluating performance of the information function, further definition of roles of public and private sources of data and information could be useful in considering both effects of information on competitive positions of individual market participants and cost effectiveness of government trade-related information programs.

Opportunities for improved sales function performance may be identified through investigation of market organization in individual countries or groups of countries and further study of the role of export agents and representatives. This can contribute to an understanding of the range of commodities that can be handled through coordinated marketing in specific geographic areas. Additionally, more precise estimates of the effect of sales volume on quality of service rendered by agents to individual or groups of exporters could be developed through research with a limited commodity focus conducted in foreign markets.

Studies focusing on organization, functions, and decision-making processes of various multinational corporations and state trading institutions with which U.S. cooperative exporters compete and/or to whom they sell could also be of value. Such studies could improve cooperative exporters' understanding of the export process and provide useful insights into specific areas where coordination in export marketing activities could be of value.

These subjects are indicative of some of the main areas in which further research could contribute profitably to improvement in the position of U.S. farmer cooperatives in export marketing. Cooperatives already have considerable experience in some of these areas. The usefulness of future research can be enhanced considerably through recognition and further assessment of that experience.

BIBLIOGRAPHY

Caves, Richard E., "Organization, Scale and Performance of the Grain Trade," *Food Research Institute Studies* 16 (1977-78).

Chase Export Credit Reports, New York; Chase World Information Corporation.

"Comecon Shipping," *European Community*, July/August 1978.

Commission of the European Community, *Exporting to the European Community: Information for Foreign Exporters*, Brussels: EC, 1977.

Committee on International Trade Documentation and U.S. Department of Transportation, *Paperwork or Profits in International Trade*, New York, 1971.

Dun and Bradstreet, *Principal International Businesses*, New York; Dun and Bradstreet International.

Federal Trade Commission. *Webb-Pomerene Associations: A 50-Year Review*, Washington, D.C.: 1967.

_____, "Webb-Pomerene Associations: Ten years later: A Staff Analysis", November 1978.

"Fresh Northwest Cherries on the Way to Japan," *The Goodfruit Grower*, July 1, 1978.

Goldberg, Ray E., "Profitable Partnerships-Industry and Farmer Co-ops," *Harvard Business Review*, March-April 1972.

Greene, Mark R., *Risk and Insurance*, Third Edition, Cincinnati: Southwestern Publishing Co., 1973.

Hammonds, T. M., *Cooperative Market Pooling*, Circular of Information 657, Corvallis, Oregon: Oregon State University Agricultural Experiment Station, 1976.

Harris, J. Michael, "Ocean Freight Rates for Major Agricultural Exports Increase Further in 1980" *Foreign Agricultural Trade of the United States*, Economic Research Service, USDA, July/August 1981.

Hirsch, Donald E., *Agricultural Exports by Cooperatives*, Farmer Cooperative Research Report 5, Washington, D.C., USDA, 1979.

Horst, Thomas, *At Home Abroad: A Study of the Domestic and Foreign Operations of American Food-Processing Industry*, Cambridge, Massachusetts: Ballinger Publishing Co., 1974.

Hulse, Fred. E. and Michael J. Phillips, *Joint Venture Involving Cooperatives in Food Marketing*, FCS Marketing Research Report 1040, Washington, D.C.: USDA, 1975.

Hutchinson, T. Q., L. A. Hoffman, and R. L. Parlett, *Improving the Export Distribution System for Fresh Fruits and Vegetables*, ERS Marketing Research Report 1027, Washington, D.C.: USDA, 1974.

Krob, Alan, "Grain Importers Seek Steady Prices, Supplies", *Farmland News*, February 15, 1979.

Morgan, Dan, *Merchants of Grain*, New York: Viking Press, 1979.

Murr, Alfred, *Export/Import Traffic Management and Forwarding*, fifth edition, Cambridge, Maryland: Cornell Maritime Press, 1977.

National Council of Farmer Cooperatives, *Names to Know-1972*, Washington, D.C.: NCFC, 1979.

Newman, Mark D., "An Evaluation of the Economic Potential for Coordination of Export Marketing by U.S. Farmer Cooperatives," Ph. D. Dissertation, Michigan State University, 1980.

_____, "Exports and Antitrust: Webb Pomerene Associations and Agricultural Exports," *The Agricultural Law Journal*, Fall 1980.

Nicholas, Constantine J., and Philip L. Breakiron, *Intermodal Transport of Frozen Poultry Products to Overseas Markets - A Comparison of Physical Performance and Costs of Van Container and Break-bulk Systems*, ARS Marketing Research Report 1025, Washington, D.C.: USDA, 1974.

Reynolds, Bruce J., *Producers Export Company: The Beginnings of Cooperative Grain Exporting*, Farmer Cooperative Research Report 15, Washington, D.C.: USDA, 1980.

U.S. Department of Agriculture, *CCC Export Credit Guarantee Program GSM-102*, Washington, D.C.: USDA, February, 1981.

United States vs. Concentrated Phosphate Export Association, Inc., et al, 393 U.S. 199, 1986.

United States vs. Minnesota Mining and Manufacturing Company, et al, 92 E and F Supp 965 and 1966, 1950.

United States vs. United States Alkali Export Association, Inc., et al, 89 F Supp 59, 1949.

Unz and Co., *The "How to" Guide for Importers and Exporters*, Jersey City, NJ, 1979.

Ward, Clement, and J. David Morrissey, *Cooperative Brands and Processed Foods*, FCS Information 110, Washington, D.C.: USDA, 1977.

Yost, Gilbert E., James B. Fountain, and Charles Pierson, "Shipping Fresh Cherries into Japan Involves Careful Industry Monitoring", *The Goodfruit Grower*, June 1, 1979.

Appendix

Sampling Procedures⁴⁵

The data collection process involved personal and telephone interviews with 130 people during the period September 1978 through August 1979. A breakdown of the sample by institutional affiliation is presented in appendix table 1.

In selecting people to be interviewed, an attempt was made to draw on diverse experience in the export process. This required a purposive sampling approach rather than a random sampling procedure. Objectives in selection of the sample included access to a wide range of commodity expertise, geographic perspective, and experience at different hierarchical levels in exporting organizations. Experience with past attempts at coordinated export marketing was considered useful. Additionally, it was considered desirable to identify constraints facing both large and small exporters.

The 30 cooperatives from which representatives were interviewed were selected purposively from a sampling frame that included the population of 73 cooperatives identified as direct exporters in 1976 and other cooperatives listed in directories compiled by National Council of Farmer Cooperatives and USDA.⁴⁶ Data that became available in October 1979 made possible an ex post comparison of cooperatives from which representatives were interviewed in this research with a size distribution of the population of direct exporting cooperatives (appendix table 2).

Appendix table 3 identifies headquarters locations of individual cooperatives by geographic region. Some cooperatives actually represent producers in several geographic regions. Inaccessibility of sales data for individual cooperatives prevented comparison of importance of those interviewed relative to total cooperative exports by region.

Appendix Table 1—Number of people interviewed by institutional affiliation

Type of institution	Number	Number of people interviewed
Cooperative	30	57
National cooperative organization	2	2
Corporate exporters and export managers	4	7
Trade promotion organizations	2	2
International transportation specialists	3	4
Financial institutions	4	5
Universities	7	14
Federal government		
USDA		39
Department of Commerce		1
Federal Trade Commission		2
State government	1	2
Total		130 ¹

¹Excluding dual affiliations.

Appendix Table 2—Cooperatives interviewed in this research compared with population of direct exporting cooperatives in 1976.

Value of 1976 direct exports Million dollars	Direct exporting cooperatives in 1976 ¹		Cooperatives interviewed in 1978-79	
	Number	Percent	Number	Percent ²
Less than \$1.0	25	34	4	16
\$1.0 - \$9.9	30	41	12	40
\$10.0 - \$24.9	6	8	3	50
\$25.0 - \$99.9	5	7	3	60
\$100.0 and over	7	10	4	57
Total	73	100	26	36

⁴⁵For a more detailed explanation of research procedures, see Mark D. Newman, "An Evaluation of the Economic Potential for Coordination of Export Marketing by U.S. Farmer Cooperatives," Ph.D. Dissertation, Michigan State University, 1980.

⁴⁶Donald E. Hirsch, op.cit.; National Council of Farmer Cooperatives, *Names to Know-1972*, (Washington, D.C.: NCFC, 1979); and Clement Ward and J. David Morrissey, *Cooperative Brands and Processed Foods*, FCS Information 110, (Washington, D.C.: USDA, 1977).

¹Hirsch, Donald E., *Agricultural Exports by Cooperatives*, Farmer Cooperative Research Report No. 5, (Agricultural Cooperative Service, U.S. Department of Agriculture, August 1979). Excludes 5 cooperatives interviewed in conjunction with this research but not identified by Hirsch as direct exporters in 1976.

²Percent of direct exporting cooperatives in 1976.

**Appendix Table 3—Geographic distribution
of interviews**

Region	Cooperatives interviewed with headquarters in region	Interviews with cooperative managers and staff		Total number of interviews	
	Number	Number Percent	Number	Percent	
North					
Central	8	12	21	24	18
Northeast	1	5	9	50	38
South	4	4	7	9	7
Great Plains	4	14	25	21	16
Northwest	3	6	11	7	5
Southwest	10	16	28	19	15
Total	30	57	100	130	100

**U.S. Department of Agriculture
Agricultural Cooperative Service**

Agricultural Cooperative Service provides research, management, and educational assistance to cooperatives to strengthen the economic position of farmers and other rural residents. It works directly with cooperative leaders and Federal and State agencies to improve organization, leadership, and operation of cooperatives and to give guidance to further development.

The agency (1) helps farmers and other rural residents obtain supplies and services at lower costs and to get better prices for products they sell; (2) advises rural residents on developing existing resources through cooperative action to enhance rural living; (3) helps cooperatives improve services and operating efficiency; (4) informs members, directors, employees, and the public on how cooperatives work and benefit their members and their communities; and (5) encourages international cooperative programs.

The agency publishes research and educational materials, and issues *Farmer Cooperatives*. All programs and activities are conducted on a nondiscriminatory basis, without regard to race, creed, color, sex, or national origin.